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ABSTRACT

A study proposed measures of equity for women for incorporation into major national processes for performance measurement. Data sources were as follows: interviews with 77 people from all state and territory vocational education and training (VET) systems, Australian National Training Authority, National Center for Vocational Education Research, and the community; documents from interviewees; and literature on performance measurement and measurement of equity for women. Findings indicated the following: measures of women's equity must reflect the shift in program budgeting to performance budgeting and the increasing importance of performance measurement; six performance measures in the national VET system have been approved; and a proposed performance measurement framework for VET is conceptually weak for women because it relies heavily on measures that can be derived from VET census data. Among findings dealing with measurement of equity for women were a highly variable policy interest in the question of equity for women at state and territory level. Most use was probably made of VET statistics to measure equity for women at provider level. Analysis of the National Women's VET Strategy with six outcomes and indicators to measure them indicated the following: no benchmarks against which to measure improvement; indicators that would not measure the stated outcome; too many or repetitive indicators for some outcomes; and measurement focus on activity, not output. Proposals for the future included principles to guide measurement of equity for women in VET and measures for the short term. (Appendixes contain a literature review, 39-item bibliography, people consulted, and consultancy brief.) (YLB)

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Equity performance measures for women in VET

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Report to the
Ministerial Council on Education,
Employment, Training and Youth Affairs
Vocational Education Employment and
Training Women's Taskforce

July 1997

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Foreword

I am pleased to present the report *Equity Performance Measures for Women*. The report was prepared for the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) Vocational Education, Employment and Training Women's Taskforce by Kaye Schofield and Associates, under the management of the National Centre for Vocational Education Research (NCVER).

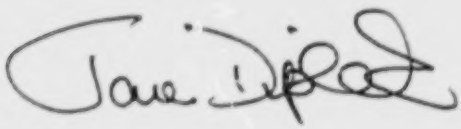
Equity Performance Measures for Women is a key project commissioned by the Taskforce in support of the *National Strategy for Women in Vocational Education and Training*, released in 1996. Measuring the performance of the vocational education and training system from a gender perspective is a crucial first step in achieving better outcomes for women and girls.

The report is timely given the current focus on the development of improved, nationally consistent performance measures for the vocational education and training sector. It will ensure that women's participation issues are part of mainstream discussion on the development of key performance measures for the sector as a whole.

I take this opportunity to thank those involved in the project's development, including the NCVER for its management and support. In particular, I also pass on my thanks to the Steering Committee of the Vocational Education, Employment and Training Women's Taskforce for their contribution:

Ms Jozefa Sobski (Chair), Director, South Western Sydney Institute of TAFE
Ms Marie Aloise, Northern Territory Employment & Training Authority
Dr Susan King, Western Australian Department of Training
Ms Wendy Murray, Western Australian Department of Training
Ms Cathy Tuncks, South Australian Department for Employment, Training and Further Education

On behalf of the Taskforce, I commend the report to you.



JANE DIPLOCK
Chair
Vocational Education, Employment and Training Women's Taskforce

June 1997

Acknowledgements

We are most grateful for the assistance given to us by many individuals and organisations in the course of this project. We have appreciated the contribution of all those listed in the appendices who gave us their time and their considerable expertise in performance measurement and equity for women.

We would also like to thank the staff of the NCVER library, and in particular Lea-ann Harris, for assistance with the literature search.

Robyn Dryen
Kaye Schofield

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Executive summary and recommendations

This is the final report of a study commissioned by the National Centre for Vocational Education Research on behalf of the MCEETYA VEET Women's Taskforce, to propose a set of measures of equity for women which could be incorporated into major national processes for performance measurement.

The study is most timely, given that improving performance measurement is a priority in the national VET system at the present time and that major decisions will be made during 1997 on a set of key performance measures for VET.

This report proposes changes to measures of equity for women compatible with existing performance measurement arrangements. Taking account of likely changes in the future, it also proposes measures of equity for women for the longer term.

Project methodology

This study has been undertaken in parallel with a number of other related initiatives. While undertaking this study, we worked with the Allen Consulting Group on two related initiatives commissioned by the ANTA Performance Review Committee. The first was a Survey of Performance Management Practices of State and Territory Training Authorities. The second was the Development of Skill Output and Efficiency Measures for VET.

This simultaneous data collection provided us with a detailed understanding of the issues and practices of performance measurement in VET, and provided the opportunity to develop performance measures for equity for women that are consistent with those being developed for the national VET system.

We used three sources for data collection:

- face-to-face and telephone interviews with 77 people from all State and Territory VET systems, from ANTA, from NCVER and from the community (These individuals furnished systemic, provider and client-level perspectives.)
- analysis of documents provided by interviewees (These ranged from research reports to statistical bulletins, equity plans and policies.)
- a comprehensive review of both Australian and international literature on performance measurement and, in particular, the measurement of equity for women

The report is presented in three chapters which describe the context of performance measurement in VET, analyse current approaches to measuring

equity for women in VET, and propose future directions. Appendix 1 is a review of the relevant literature.

Summary of findings

- Governments throughout Australia are steadily moving from program budgeting to a form of output or performance budgeting and, in a period of budget constraint, performance measurement has become of increasing importance. This is leading to a nation-wide shift from a focus on inputs and activity as the basis of accountability, resource allocation and improvement to a strong focus on outputs and outcomes. Measures of equity for women must take account of and reflect this shift.

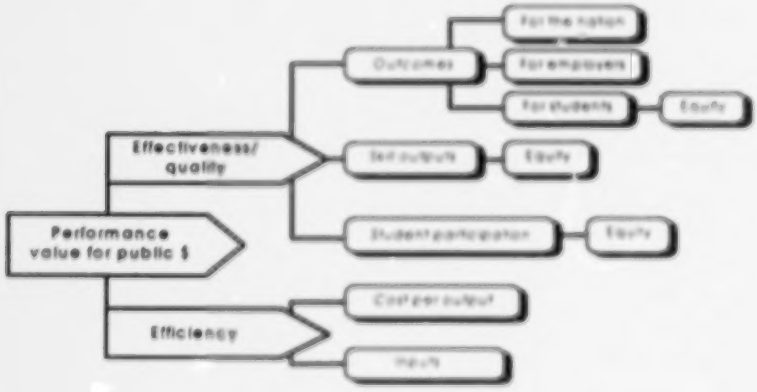
- There are six performance measures which have been approved by Ministers for use within the national VET system. These six measures, when taken together, form a suite by which some aspects of the performance of VET can be assessed. However, in practice, there has been a strong emphasis on just two of them—actual & planned student load (enrolments and annual hours curriculum) and $/annual hours curriculum (AHC).

- The Survey of Performance Management Practices of State and Territory Training Authorities undertaken by the Allen Consulting Group for the ANTA Performance Review Committee[1] found that one of the key trends evident within States and Territories is an

> *... increasing emphasis on improving performance management practices, on building a performance culture within vocational education and training, on using data in a more systematic way for continuous improvement and, in particular, on improving resource allocation systems.*

- A performance measurement framework, consistent with the generic framework of the Review of Government Service Provision, is also to be considered by the Committee. This framework is illustrated in the diagram below:

Proposed performance measurement framework for VET[2]



From an equity perspective, there is a significant conceptual weakness in the proposed framework. It is the assumption that equity in outcomes for women is of value to individual women only, and not to the nation or employers.

- There is the tendency within the VET system to rely heavily on the measures which can be derived from VET census data, rather than thinking more broadly about the set of measures needed and then the data collection from which they can individually be drawn.
- *Benchmarking VET* is the first attempt at developing a format for reporting comparable performance information across VET systems. As ANTA reporting requirements shift focus to outcomes and outputs, it could reasonably be expected that future editions of *Benchmarking VET* would contain more analysis of equity outputs and outcomes.

Measurement of equity for women

- We found highly variable policy interest in the question of equity for women at State and Territory level. In some jurisdictions, we found a strong commitment to reporting on the albeit limited participation measure. In most, we found that this was considered routine reporting with few implications for action. In some, we found a distinct and disappointing reluctance for a range of reasons to report any data by gender.
- Within the current framework, there is an unwritten assumption that participation of women in VET is the principal measure of equity for women, an assumption that we reject in this study.
- In 1996, ANTA published a major report, *Participation and attainment of individual client groups within vocational education and training*, which sets out to provide baseline participation and attainment data for four equity target groups in VET. Women are one of these target groups. Analysis of outcomes is restricted to module results by discipline group for Australia, and tables from the Graduate Destination Survey. The State-by-State analyses contain no outcomes data.
- At the State and Territory level, there are a variety of regular publications which emanate from training authorities and agencies. These range from annual reports to Parliament, through to statistical bulletins on aspects of TAFE participation,[1] or particular issues on apprenticeships and traineeships.[2] What these publications have in common are aspects of participation rates by gender.
- In contrast, special programs for women tend to have been closely scrutinised, measured and reported on in detail over the last fifteen years.
- Most use is probably made of VET statistics to measure equity for women at provider level. However, this use is largely undocumented and uncoordinated. In our consultations, if measures were used at all for program, department or branch accountability, for resource allocation or improvement within the institution, they were those listed in the National Strategy for Women in VET.

Measurement of the National Women's VET Strategy

- The National Women's VET Strategy specifies six outcomes and the indicators by which they will be measured to determine the success of the strategy.

  We note that the statement of the strategy goal lists four outcomes as contributing to a further two outcomes, while the section on KPIs lists all six outcomes to be measured. This report provides a detailed analysis of each of the outcomes and attendant indicators and suggests:

  - There are no benchmarks against which improvement might be measured.
  - Some of the indicators will not measure the stated outcome.
  - For some outcomes there are too many or repetitive indicators.
  - The focus of measurement is on activity rather than output.

- The National Women's VET Strategy was developed prior to some fundamental changes within the VET system. These include the introduction of New Apprenticeships, the development of the National Training Framework and the agreement of Ministers to a new set of planning and accountability arrangements.

- Expansion of employment-based training is a priority for all stakeholders under the new arrangements. It is in the interest of the national VET system, States/Territories and providers as well as clients of VET, that this expansion provides opportunities for both women and men. Measurement of the growth and gender distribution of contracts of training under the New Apprenticeship arrangements will assume increased importance.

- Data manipulation and analysis are resource intensive. Where centralised statistical services exist they are largely consumed with activity related to profiling and the annual VET collection; they tend not to have expertise in issues of equity. Where specialised women's units exist they are largely consumed with policy or program activity; they tend not to have expertise in statistical analysis.

- In the higher education sector, the concept of a *threshold* has been used to focus attention on and define non-traditional areas of study. The *threshold value* is the participation rate for an identified group which divides a course of study into traditional or non-traditional. The actual value at which the threshold is set is somewhat arbitrary.

- While the use of the concept of a threshold value may be of some benefit in the VET sector in focussing effort, it is our view that it adds little to benchmarking performance. The concept of 'traditional/non-traditional' is itself a relative concept. Without consideration of other dimensions, the concept of traditional/non-traditional does not lead to any useful measure of performance.

- Reference values refer to a *relevant population* for comparison purposes. It is our view that reference values are a basic foundation for equity strategies. In relation to participation, they provide information that describes the pool of potential VET students/trainees. They also allow for general strategies to be customised by particular providers.

- The question of institutional targets is a sensitive one within VET at the present time. In our discussions with States/Territories, we noted a conceptual reluctance to endorse equity targets for women although the application of targets in other areas of delivery and management is widespread. The arguments against targets ranged from paucity of data and lack of comparability; to frustration with accountability systems that have targets but no reporting requirements; to a sense of the futility of setting targets without any actual or implied sanctions for not meeting them.
- It is our view that targets are a standard feature of VET in the 1990s and for the forseeable future. They underpin all resource agreements and performance agreements. The challenge is to set realistic and meaningful targets that will result in real improvements in equity outcomes.

Recommendations

As performance measures in VET are currently being fundamentally reviewed, it is likely that 1998 and perhaps 1999 will be a transition period during which new measures will be developed and applied within the VET system at national, State and provider level. At the same time, a new national strategy will be developed for 1998 which will have implications for performance measurement arrangements.

We therefore believe that the VET system should make some short-term improvements in current measures of equity for women for application in 1998 and possibly continuing through 1999. At the same time, it should plan the introduction of new measures of equity for women to coincide with the introduction of new general measures for VET.

Recommendations for the national VET system

Recommendation 1

To give greater clarity, precision and direction to the development and use of measures of equity for women in VET, it is recommended that the following nine principles be endorsed by the MCEETYA VEET Women's Taskforce.

Principles to guide measures of equity for women in VET

1 Nationally agreed measures of equity for women should be limited in number.

2 Measures should be simple, well-defined and easy to use.

3 Measures should be durable, permitting time-series analysis and reporting.

4 Agreed measures should be available at each level in the VET system for the purpose of

- public accountability
- resource allocation
- performance improvement

5 Agreed measures should relate to the major policy priorities for achieving equity for women in VET.

6 Measures should include participation of women but should have their primary focus on the measurement of outputs and outcomes.

7 Agreed measures of equity for women should be derived from VET census data and VET Periodic Survey, supplemented by data derived from external sources and by tightly targeted qualitative and quantitative research.

8 Where measures are used as targets, the targets should be relative targets and not blanket targets.

9 Reporting on performance of the Australian VET system against agreed measures of equity for women should work towards international comparisons of performance.

Recommendation 2

To improve the reporting of performance measurement of equity for women it is recommended that *Benchmarking VET:*

- include gender as a variable in reporting MLCR
- include gender as a variable in reporting participation by age, ethnicity, disability, aboriginality, geographic location, and employment status
- add a new table: 'qualification completed' by AQF level and by gender

Recommendation 3

To ensure the completeness of the proposed new framework for measuring the performance of the national VET system, it is recommended that the MCEETYA VEET Women's Taskforce initiate discussion with ANTA on the principle that equity is of as much importance 'to the nation' and 'to employers' as it is to the individual student.

Recommendation 4

To improve the utility of the KPIs in measuring the effectiveness of the National Strategy for Women in VET, it is recommended that the indicators be amended as proposed in the following table.

Proposed changes to key performance indicators in the National Women's Vocational Education & Training Strategy

Policy outcome	Indicator(s)	National interest	State/Territory interest	Provider interest
Women distributed more broadly across fields of study	◆ Module enrolments by discipline group	Aggregated to State/Territory level, reported at branch of learning level	Reported at branch of learning level, by provider	Reported at major discipline group level
Increase in the number of women completing VET programs	◆ Module outcome ◆ MLCR	Aggregated to State/Territory level, reported in comparison to all students/trainees	Reported by provider in comparison to all students/trainees	Reported by branch of learning, by delivery strategy, and in comparison to all students/trainees
Increase in number of women with VET qualifications at all levels	◆ Qualification completed	Aggregated to State/Territory level, reported by qualification category	Reported by provider by qualification category	Reported by branch of learning and by delivery strategy
Increase in participation and improved outcomes for specific groups of women	◆ Above indicators disaggregated on the basis of gender, age, country of birth, language spoken at home, disability, Aboriginal and Torres Strait Islander, geographic region, employment status	Aggregated to State/Territory level, reported against outcome for all women students	Reported by provider against outcome for all women students	Reported by branch of learning, against outcome for all women students
	◆ Participation rates for these groups	Aggregated to State/Territory level, reported against population representation	Reported by provider, against population representation. In metropolitan areas, it may be necessary to have a standard population measure.	Reported by branch of learning

Recommendation 5

Until further work is done to develop measures of the New Apprenticeship arrangements, it is recommended that there be two additional indicators in the National Strategy for Women in VET to assist in identifying the extent to which workplace training is accessible to women. They are:

- employment status
- delivery strategy

The Allen Consulting Group has proposed three measures to the Performance Review Committee to identify skill output and efficiency. They are:

- assessed and successfully completed AQF recognised qualifications
- assessed and successfully completed units of competency
- assessed and successfully completed modules

We support the use of skill output measures of completion of AQF qualifications, units of competence and modules of training and note that each is capable of disaggregation by gender. However, a move to extensive use of completion data increases the significance of measures of equity in assessing the total performance of a VET system or institution.

In a perfect market, the purchase of 'successful training completions' would involve the purchaser setting a unit price for completion. As markets are less than perfect, a financially pressed provider might be tempted to shift its selection policies to achieve a greater proportion of students/trainees likely to complete with the least amount of inputs. Close monitoring of the consequences for women's overall participation in VET will be essential to ensure equity in access.

Recommendation 6

To guard against unintended, undesirable consequences for women from the focus on completions and unit cost, it is recommended that participation and outcomes be closely monitored.

Efficiency in the allocation of public funds is important for accountability, resource allocation and performance improvement and should not be overlooked in considerations of measurement of equity. The direct relationship between expenditure on gender equity initiatives and equitable outputs is a largely unexplored field. There is a need to begin to measure what are the most efficient means of achieving equitable outcomes.

This question of efficiency is of interest at all levels of the VET system. For that reason, we see value in the co-operative development at a national level of measures, models or systems by which a purchaser could make an informed choice about the training product which can produce outputs and outcomes for women most efficiently.

Recommendation 7

To improve the efficiency of equity strategies, it is recommended that the MCEETYA VEET Women's Taskforce supports a comparative research program. This would identify which strategies, under what conditions, produce the most effective improvement in equitable outcomes for women.

The 1996 ANTA report *Participation and attainment of individual client groups within vocational education and training* aimed to provide baseline participation and attainment information for, inter alia, women. We consider this a good but insufficient start.

There is a need for resources to be committed to an exhaustive analysis of existing VET data by gender, down to provider level, to serve as a baseline benchmark and provide a comprehensive picture of past trends and current participation and activity of women in VET. This exercise probably needs to be done once every five years.

This cyclic approach would mean that in other years, effort could be directed to both modelling and forecasting, and sample survey work on relevant issues. We believe that such an approach may help to overcome some of the problems associated with time lag between data collection and analysis, and implementation of strategies based on that data.

Recommendation 8

To establish valid and reliable reference values from which to set targets and measure improvement, it is recommended that every five years there be a comprehensive analysis by gender of all collected VET data.

An alignment between the baseline report proposed above and the final evaluation of the current strategy should be established, with the baseline report providing major input to the evaluation and development of the next strategy. To get this alignment, the baseline report would need to be published in 1999, using 1998 VET data.

Recommendation 9

To inform the development of the next iteration of the National Strategy for Women in VET, it is recommended that the baseline data analysis be conducted on the 1998 VET data, for publication in early 1999.

Recommendations for State/Territory systems

Recommendation 10

In order that providers are able to establish reference values for relevant populations, it is recommended that States/Territories provide access to relevant data and assistance in their interpretation.

Recommendation 11

To better focus equity efforts at provider level, it is recommended that the strategy's stated industry priorities:

- industries where women are a high percentage of the workforce
- growth industries where women are a low percentage of the workforce
- currently emerging industries

are more clearly defined and given more prominence.

Recommendation 12

To encourage provider efforts to improve equity outcomes for women, it is recommended that State/Territory systems give consideration to methods of 'rewarding' providers who achieve their equity targets. Such methods should be based on identifying rewards seen to be of value by providers. They might also include additional funding for special initiatives, or preferential funding on a unit cost basis for a module the provider wishes to enhance.

As information becomes available from Recommendation 7, decision making about 'rewards' should become more clear.

Recommendation for providers

Recommendation 13

Within the framework of the national strategy and performance/resource agreements between State/Territory training authorities and providers, it is recommended that providers set equity performance targets for women which are referenced to their own populations, industries and educational profile. For metropolitan regions serviced by multiple providers, it may be desirable to have common reference values.

Conclusion

The performance measurement area in VET at the present time is extremely fluid. Thus, it presents a significant opportunity to make immediate improvements to current measures and to develop measures which will assist VET stakeholders at each level of the system to achieve equitable outcomes for women. Once there is clarity, precision and agreement on the most useful measures, attention can then focus on the more important task of using them in ways which actually assist VET stakeholders to deliver better outcomes to women throughout Australia.

Notes

1 Drawn from Allen Consulting Group 1997, *Output and efficiency measures for vocational education and training*, final report to ANTA Performance Review Committee, May, pp.18-19

2 From papers for the Performance Review Committee meeting, 22 April 1997

[3] ANTA 1996d, *Benchmarking VET*, Brisbane, July

[4] ANTA 1996c, *Participation and attainment of individual client groups within vocational education and training*, May

[5] See for example Statistical Services Unit 1996, *Statistics newsletter*, NSW TAFE Commission, June

[6] See for example Research Branch 1997, *Apprentice and trainee statistics for the month of February 1997*, DVET, Tasmania

[7] Martin, L M 1994, *Equity and general performance indicators in higher education*, AGPS, Canberra

Chapter 1: Context

Introduction

The project

This is the final report of a study commissioned by the National Centre for Vocational Education Research on behalf of the MCEETYA VEET Women's Taskforce.

The purpose of this study is to propose a set of measures of equity for women which could be incorporated into major national processes for performance measurement. The consultancy brief is provided in Appendix 4.

The study is most timely, given that improving performance measurement is a priority in the national VET system at the present time and that major decisions will be made during 1997 on a set of key performance measures for VET.

This coincidence of effort between the development of general measures for VET and the development of equity measures for women has been both a strength and a constraint in this study. The strength is that measures of equity for women are being developed alongside a review of general VET measures. This offers a valuable opportunity to ensure that general measures incorporate the measurement of equity for women. The constraint is that there is little firm ground from which to build equity measures for the future. Not only are the general measures for the national VET system under review; so, too, is the National Strategy for VET, its annual national priorities, its national key results areas and the key performance measures to assess it.

Consequently, this study has been undertaken in parallel with a number of other related initiatives and has taken them into account in formulating a set of equity measures for women for both the short and long term. This final report incorporates current developments in relation to performance measurement in VET.

While undertaking this study, we worked with the Allen Consulting Group on two related initiatives commissioned by the ANTA Performance Review Committee. The first was a Survey of Performance Management Practices of State and Territory Training Authorities. The second was the Development of Skill Output and Efficiency Measures for VET. We wish to acknowledge here the input from these two projects of the Allen Consulting Group to this study of equity measures for women. However, responsibility for this report is entirely ours.

Development, interpretation and use of measures

The brief for this project is the *development* of a set of measures through which equity for women in VET could be assessed, judged or evaluated. In this sense, the task is primarily a technical one.

However, to be useful, measures need *interpretation*. Too often, extensive and complex measurement tables are put into the public domain with little or no interpretation attached to them, sometimes leading to inappropriate conclusions about performance. Therefore the actual assessment, judgement or evaluation of the performance of providers, systems or the national VET system against those measures is a vital dimension of performance measurement. The extent to which the VET system is or is not performing well against measures of equity for women is a matter of applying agreed measures and interpreting the data. Consequently, it is outside the scope of this study.

We do, however, strongly support the view expressed by the Steering Committee for the Review of Commonwealth/State Service Provision, that[1]

> *When assessing performance, it is important that each indicator be considered as part of a suite and not interpreted in isolation from other indicators that make up the performance framework.*[2]

The *use* to which the measures are put and by whom is the third and important dimension of performance measurement. A measure may be technically sound and sensibly interpreted. However, if it is used for a purpose for which it was not designed, it fails to achieve its original aim. One example might be the use of data derived from the existing questions contained in the VET Survey of Employer Satisfaction for the purpose of resource allocation to individual providers.

We have proceeded on the basis that there are four principal users of VET measures of equity for women:

- national VET authorities
- State/Territory VET authorities
- VET providers
- VET clients—both individuals and industries

Therefore, we have been mindful in developing measures of equity for women that can be employed by a variety of VET users at different levels.

Consistent terminology

The performance measurement story needs to use consistent terminology. In our readings and consultations, we found little consistency and a good deal of confusion regarding the basic terminology used in discussing and deciding on measures of equity for women. To paraphrase a view that was put to us, 'one woman's output is another woman's outcome'. There is a good deal of truth in this, and different organisations and jurisdictions around Australia will continue

to use terminology suitable for their particular context. However, for the purposes of this study we have adopted the following definitions:

Term	Definition
Performance measurement	A systematic way of assessing, judging or evaluating performance
Performance measure	A policy-relevant tool or instrument such as a statistic, number or qualitative description that permits an assessment, judgement or evaluation to be made about the performance of an institution or system. The assessment, judgement or evaluation is made from a reference point such as ◆ a goal or an objective ◆ an absolute standard ◆ past performance ◆ comparative performance
Benchmarking	A systematic process of comparing performance with reference to a benchmark
Benchmark	A reference point from which performance is measured
Inputs	Financial & non-financial resources used to produce goods and services
Outputs	Quantity & quality of goods or services provided
Outcomes	Quantified results or impacts of goods or services provided
Efficiency	Cost, cost per unit or productivity of a given output or outcome
Effectiveness	How well the outputs achieve the stated objectives

Purposes of performance measurement in government

Decisions about measures of equity for women require clarity as to the purpose of performance measurement generally and measurement of equity specifically.

We start this study from the proposition that, in the VET system, there are three fundamental purposes of performance measurement: public accountability, resource allocation and performance improvement.

Public accountability

Public accountability refers to the efficiency and effectiveness with which government services in vocational education and training are delivered to women.

We regard public accountability as a two-way process. First, there is accountability to government by service providers. Second, there is public accountability to clients by service providers in receipt of public funds. While the first process has been strongly emphasised to us in discussions of performance measurement in VET, accountability to women as clients was rarely mentioned.

Both public and private providers are publicly accountable for the use of public funds. However, the way in which the accountabilities are specified tends to differ between the two groups.

In the case of public providers of VET, general accountabilities to government for the use of public funds are specified under law, regulation or policy. If a purchaser-provider relationship is established or emerging, it may be also through specific resource or performance agreements between government and the agency or provider. Measures of planned and actual performance rather than general statements of intent are central to this process of specifying accountabilities.

In the case of private providers, the accountabilities are specified in the contract between the purchaser and provider. This has been termed contractual accountability.[4]

By definition, the public accountability purpose yields data wanted by agencies external to the service provider and is generally in the public domain.

Resource allocation

There are important specific applications of the public accountability purpose, not the least being the allocation and monitoring of public resources to and between service providers.

As the training market has developed and public funds increasingly become allocated on a competitive tendering or user-choice basis, the use of measures for purchasing and/or funding training has become more common.

There is a maintenance of effort reporting obligations under the ANTA agreement and the centrality of activity tables in the allocation of Commonwealth Growth Funds to VET. This has led the VET system to heavily rely on measures for the resource allocation purpose rather than on the broader public accountability purpose.

The danger in this is goal displacement, where what is being measured for the purpose of resource allocation becomes an agency's or provider's pre-occupation at the expense of other relevant measures.

Performance improvement

> *Measuring performance is, by itself, no substitute for improving performance in the provision of services but it can help facilitate continuous improvement ...*[3]

Routine collection and reporting on a measure required by a regulation, policy, or contract may not, of itself, lead to changed behaviour or improved performance. The impact of any particular measure will depend on the use to which it is put. If it is used for public comparisons with other providers or jurisdictions for resource allocation or withdrawal, then changed behaviour is likely to result. If data is collected and routinely reported without interpretation, analysis or consequence, changed behaviour is unlikely.

Apart from the impetus to performance improvement from accountability measurement and reporting and resource allocation, there is a growing commitment by government to encouraging self-review for the purposes of improvement at both agency and local provider level. This has been influenced in part by the quality movement and driven by budgetary constraints and increasing competition between agencies and institutions not simply for resources, but for clients.

Where a training organisation has an improvement orientation and wishes to improve its performance in the delivery of services to women, for example, it will obtain and use data to do so. Where no such orientation exists, self-assessment is unlikely to occur, or to occur in a meaningful way.

Obviously, there is overlap in practice between these three purposes of performance measurement. Measures used for public accountability or resource allocation purposes may also be used for performance improvement. However, this overlap needs to be carefully handled to ensure performance measures are fit for their purpose.

Trends in performance measurement in government

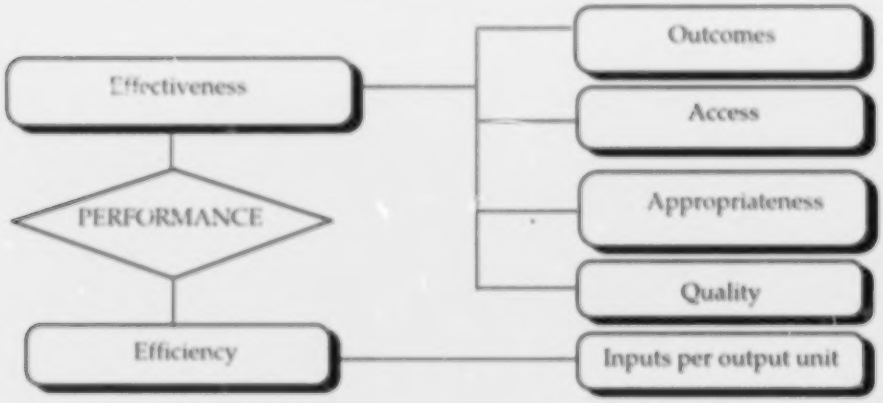
Governments throughout Australia are steadily moving from program budgeting to a form of output or performance budgeting. In a period of budget constraint, performance measurement has become of increasing importance to government. This is leading to a nation-wide shift from a focus on inputs and activity as the basis of accountability, resource allocation and improvement, to a strong focus on outputs and outcomes. Measures of equity for women must take account of and reflect this shift.

The Review of Government Services, operating under the auspices of the Council of Australian Governments (COAG), has recently produced the second of a series of regular reports on government service provision.

> *The aim of the Report series is to inform governments, service agencies, the clients of these agencies and taxpayers—the wider community—about government performance in delivering major government funded (and largely government provided) social services. It does this by collecting and publishing comparisons of the efficiency and effectiveness of the provision of a broad range of government services.*[4]

The report uses a generic framework of performance indicators which is then customised for each area of human service considered by the review. The diagram below illustrates this generic framework.

The framework of performance indicators



Increasingly, customised versions of this framework are being used at a national level by human services agencies as a way of organising their own performance measurement systems.

Chapter 4 of Volume 1, 'Vocational education and training', relies almost entirely on reproducing data from various ANTA reports. It considers five groups of effectiveness indicators:

- employer outcomes
- student outcomes
- planning process
- access and participation
- equity

Two groups of efficiency indicators are reported

- unit costs
- asset utilisation

At State and Territory level, there is a range of whole-of-government performance measurement and reporting initiatives underway. These include agency specification of output and outcome measures for budgeting purposes and, in one instance, auditing and reporting by the Auditor-General of agency-produced key performance indicators for accountability purposes.'

Performance measurement in VET

The VET system has displayed a commendable commitment to developing measures by which the performance of the system could be judged. At all levels, it

has invested considerable resources to the task of improving data definition and collection to ensure validity, reliability and comparability.

Efforts to develop common standards for data collection in the VET sector can be traced back to 1992 with the development of AVETMISS. For the first time, this standard made possible a common language for the development, interpretation and use of performance measures.

At the present time, there are six performance measures which have been approved by Ministers for use within the national VET system.

Interim performance indicators and measures currently used by the national VET system

Indicator	Performance measure	What it measures
Activity	Participation rates (enrolments)	Participation of target groups
	Actual & planned student load (enrolments and annual hours curriculum)	Changes in level of activity across States/Territories
Activity (Cost)	$/annual hours curriculum (AHC)	Cost-efficient delivery of public funds
Output	Module load completion rate (MLCR)	Effectiveness in turning activity into successful outputs weighted for module size
Outcome	Graduate destination and satisfaction	Quality in terms of impact on skill developed in workforce and client satisfaction with training effectiveness and relevance
	Employer satisfaction	Employer satisfaction with standards and flexibility of system

Generally, these measures in a disaggregated form are being used by State and Territory training authorities not only for national reporting purposes, but also for their own State or Territory purposes. For example, they can be used in annual reports to Parliament, or for inclusion in performance or resource agreements with public providers or contracts with private providers when purchasing or funding training delivery.

These six measures, when taken together, form a suite by which some aspects of the performance of VET can be assessed. However, in practice, there has been a

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strong emphasis on just two of them—actual & planned student load (enrolments and annual hours curriculum) and $/annual hours curriculum (AHC).

As suggested earlier, the activity tables underpinning State/Territory and national training profiles and the maintenance of effort requirements are currently the measures which are most used for public accountability and resource allocation. The other measures are 'taken into account' in planning and resource location and reported on at national and State/Territory level and, to a lesser extent, at provider level. However, they do not carry the same weight as actual and planned student load and $/AHC.

Efforts to develop a national performance reporting system which has the confidence of individual jurisdictions culminated in the publication in 1996 of the 1995 *Benchmarking VET* report.[9]

Part B of the report provides an analysis of the six VET performance measures referred to earlier.

Data collection

Three methods are used for collecting data to measure performance in VET.

- There is the population census, e.g. the annual VET collection, which requires data collection on every student/trainee in VET in the preceeding year. Public providers are required to provide AVETMISS-compliant data on all students. In most instances, private providers in receipt of public funds have similar data collection and reporting obligations. This data forms the annual VET statistical collection. In all cases, data collected about 'clients' includes gender as a reporting field.
- There is the population survey, e.g. the Graduate Destination Survey, which sent surveys to every TAFE graduate of 1994 and some 61 per cent of recipients voluntarily responded.
- There is research, which may use either of the previous methods of data collection, or stratified samples based on particular characteristics of the population under review. The National Employer Satisfaction Survey is an example of a stratified sample survey. There is also a good deal of evaluative research to assess the effectiveness of particular programs or strategies; and there is speculative research, such as research into the access of women to training in enterprise agreements.[10]

Each of these methods has value in particular contexts. The VET census provides much quantitative data, while a sample survey can provide both quantitative and qualitative data. Census data will provide indicators of difference, while a sample survey can (but doesn't necessarily) seek causes of difference. The sample survey can certainly drill deeper than a population census. If properly stratified, the results from a sample survey can be extrapolated to a wider population; that is, the interpretation of results is not confined to the individuals surveyed. Evaluative and speculative research can provide quantitative and qualitative data for accountability and improvement purposes.

We think it useful to draw attention to this matter because of the tendency within the VET system to rely heavily on the measures which can be derived from VET census data. Rather, it would be preferable to think more broadly about the set of measures needed and then the data collection from which they can individually be drawn.

At State and Territory level

The Survey of Performance Management Practices of State and Territory Authorities undertaken by the Allen Consulting Group for the ANTA Performance Review Committee flags some of the key trends evident within States and Territories.

> *... State and Territory Authorities around Australia are placing an increasing emphasis on improving performance management practices, on building a performance culture within vocational education and training, on using data in a more systematic way for continuous improvement and, in particular, on improving resource allocation systems.*
>
> *Many of the training Authorities consulted ... have expressed a wish to emphasise more strongly output and, more particularly, outcomes relative to activity than has been the case to date and also to achieve better alignment between planning systems, resource allocation systems and monitoring and review systems.*
>
> *There are major efforts at both system and provider levels to ensure that data collection is AVETMISS compliant, timely and of good quality to provide a reliable basis for analysis and use in performance management.*[11]

In relation to measures of equity for women, we found policy interest at State and Territory level to be highly variable. Because AVETMISS requires all enrolments to record the sex of the enrolee, there is the capacity to report on and interpret all existing VET measures by sex where that is seen to be useful, so data availability is not an impediment.

In some jurisdictions, we found a strong commitment to reporting on the albeit limited participation measure. In most, we found that this was considered to be routine reporting with few implications for action. In some, we found a distinct and disappointing reluctance—for a range of reasons—to report any data by gender. This underscores a fundamental feature of performance measurement—the measure is used only if it is seen to be relevant for accountability, resource allocation or improvement purposes.

Emerging national directions for VET measures

During 1997, major efforts are being made to improve performance measurement throughout VET.

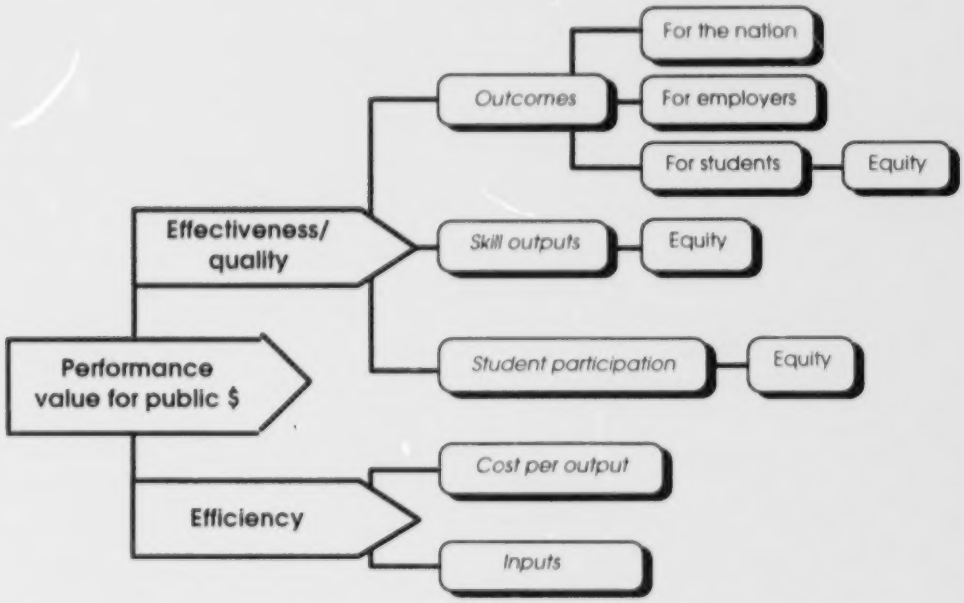
At the national level, the ANTA Board has established the Performance Review Committee for a period of one year to propose a set of long-term key performance measures for the VET system. The general thrust of the Committee's deliberations is a wish to shift from the current strong reliance on activity measures, especially AHC and $/AHC, to emphasising output and outcome measures.

The committee commissioned the Allen Consulting Group to identify measures of skill output and efficiency. While the proposed output measures are still under consideration, they are important to examine in this study. They are proposing three output measures:

- successfully assessed and successfully completed AQF recognised qualifications
- assessed and successfully completed units of competency
- assessed and completed modules

The output measures would form part of a suite of key performance measures for the national VET system. The ANTA Performance Review Committee is still considering other measures forming the suite. However, a performance measurement framework, consistent with the generic framework of the Review of Government Service Provision, is also to be considered by the Committee. This proposed framework is illustrated in the diagram below:

Proposed performance measurement framework for VET[12]



The important features of this proposed framework, from an equity perspective, are

- the participation measure remains as a measure of women's access to VET
- skill output measures, when they are finalised, would be capable of disaggregation by gender
- outcomes for women would be measured and presumably reported on

The Performance Review Committee, in considering this proposed framework, indicated its wish to ensure that equity was positioned as a key domain, along with effectiveness and efficiency. The committee did not want equity to be perceived as a subsidiary aspect of performance measurement in VET.

From an equity perspective, there is one significant conceptual weakness in the proposed framework. It is the assumption that equity in outcomes for women is of value to individual women only, and not to the nation or employers. There is also the important question of what reporting on equity dimensions of VET measures might be required at what level.

However, this framework is still under consideration and the national situation is in a process of transition. This study could inform further iterations of the national framework and measures.

Chapter 2: Current approaches to measuring equity for women in VET

Measuring equity in the national VET system

The six performance measures, along with other instruments, have been used by the national VET system for the purpose of accountability and resource allocation. They have shaped the foundations of performance measurement in VET at all levels of the system.

Within the current framework, there is an unwritten assumption that participation of women in VET is the principal measure of equity for women, an assumption that we reject in this study.

Benchmarking VET[11] is the first attempt at developing a format for reporting comparable performance information across VET systems.

Chapter 7, 'Participation in TAFE and Training', includes:

- participation rates by sex and by State
- participation in TAFE by age and sex
- participation rates of males and females (aged 15-24) across education sectors

The publication also contains significant statistics by gender on the employment status of graduates, their satisfaction with training and their reasons for further study. These statistics are drawn from the 1994 ABS Graduate Outcomes (TAFE) Survey.

As ANTA reporting requirements shift focus to outcomes and outputs, it could reasonably be expected that future editions of *Benchmarking VET* would contain more analysis of equity outputs and outcomes. A table comparing module enrolments and completions by gender would be a desirable beginning.

The 1997 *Report on government service provision* contains a report on VET performance.[12] It uses data gathered from other sources such as ANTA and ABS, but often omits their technical notes which explain aspects of the data.

The report reproduces a table on graduate outcomes[13]. It attributes this to ANTA without any warning about the possible error rate in a voluntary survey with a 61 per cent response rate. The table suggests that 54.7 per cent of 1995 TAFE graduates were women when, in fact, the table illustrates that 54.7 per cent of those who responded to the survey were women. As there is no reporting of the characteristics of the response group in comparison with the total group of graduates, it is quite possible that this 'outcome' is skewed. This table should not be reproduced without technical detail, as it may give an overestimated picture of

the outcomes for women. This is simply one example of the need for careful interpretation of measurement data.

Notwithstanding this limitation, the report does make reference to gender and access for target groups. We note that the indicators for gender are within the access and participation grouping rather than the equity grouping, where women are not identified as a target group.

Additional measures reported are:

- participation rates for males and females by State
- a trend series for participation of females as a proportion of TAFE students from 1988 to 1995

In 1996, ANTA published a major report, *Participation and attainment of individual client groups within vocational education and training*[13], which sets out to provide baseline participation *and* attainment data for four equity target groups in VET. Women are one of these target groups and Chapter 3 is devoted to providing baseline data for their participation and attainment.

This report contains population and labour force analysis, including participation in post-compulsory education. It has State-by-State analyses of participation in TAFE training. The analyses of commercial training provision and employer-based training are for Australia. Analysis of outcomes is restricted to module results by discipline group for Australia, and tables from the Graduate Destination Survey. The State-by-State analyses contain no outcomes data.

This is a useful starting point from which to measure change. However, it does not go far enough to be used as the baseline from which equity for women in VET or the success of the National Strategy for Women in VET could be measured.

Measuring equity in States and Territories

At the State and Territory level, there are a variety of regular publications which emanate from training authorities and agencies. These range from annual reports to Parliament, through to statistical bulletins on many aspects of TAFE participation,[14] or particular issues on apprenticeships and traineeships.[15] These publications have in common various aspects of participation rates by gender. Some also include a trend series over five or ten years. For all the data collected, this seems to be the extent of its regular use at systemic level. Where resources are specifically allocated for a particular project, the VET census or survey data may be further manipulated and analysed to produce research reports[16] or information bulletins on women in VET.

The exception appears to be New South Wales, where the Women's Education and Training Co-ordination Unit has committed resources to look at a number of measures. These include women's application rates for courses and the success rates of those applications, women's pathways from previous enrolment, course completions and module completion rates.

The picture is quite different for special programs for women. These programs tend to have been closely scrutinised, measured and reported on over the last fifteen years. We were provided with one State's current pro-forma for annual reporting on women's programs. This required an extensive range of statistics down to module level on participation, application, unmet demand, cost per SCH, reason for attrition, and other study by the student in the same year. This information is then used for planning and resource allocation purposes in relation to special programs for women. This level of detailed measurement and reporting is not required for general VET provision.

Measuring equity at the provider level

It is at provider level that most use is probably made of VET statistics to measure equity for women. However, this use is largely undocumented and uncoordinated. What is not known is whether there is any duplication of effort in manipulating systemic data so that a particular provider can measure its own performance.

We interviewed staff at provider level in three States, who indicated they had manipulated systemic data to provide participation statistics by gender for their institution. As the primary focus of effort for women's/equity officers at provider level has been on increasing women's participation across fields of study, these measures have served at least to monitor progress against that objective.

Apart from this, we did not find any new or different measures being used by providers other than general VET measures disaggregated by gender. If measures were used at all for program, department or branch accountability, for resource allocation or improvement within the institution, they were those listed in the National Strategy for Women in VET.

While this may be an issue of the availability of resources which we take up later in this chapter, we believe that it is also an issue of lack of know-how in relation to performance measurement. At provider level, we believe that performance measurement to improve outcomes is at least as important as these other two. To achieve this purpose, the national measures are but a first step.

Take the analogy of an elite athlete and her coach. One performance indicator might be that the athlete wins gold medals. The athlete enters race 1 and comes third. Two weeks later she enters race 2 and comes first. Clearly the indicator shows improvement—but does it? Even though the physical conditions such as wind, weather, track condition may have been the same, her time for the second race may have been much slower. Her coach, noting that the performance criteria was winning medals rather than improved times, may have entered her in a race with lesser competitors.

The coach has achieved the required outcome, and the next stage of funding is assured. But the coach wants to be able to ensure on-going funding, so needs to establish a continuous improvement regime. Neither increased times nor winning medals will be sufficient information for the coach to know what combination of training, match-race experience and conditions will be needed to produce

consistent improvement in both race times and medal-winning performances. For this, a much more complex set of measures will be required.

The winning of gold medals is much like ANTA requiring certain outcomes from the States and Territories. The indicators serve at a national level to determine whether funding will continue. At State/Territory level, a little more detail is required so that the State/Territory can be certain that the profile targets have been met, or that particular State/Territory priorities have been implemented. The level of detail again is at indicator level, but may involve more indicators, or composite indicators.

It is at provider/coach level that the detailed analysis is required to explain differences and suggest the more likely roads to sustained performance improvement. We explore some possible options for these appropriate performance measures in Chapter 3.

Measuring the National Women's VET Strategy

The National Women's VET Strategy specifies the following outcomes and the indicators by which they will be measured so as to determine the success of the strategy.

Outcome	Indicator
Increase in the number of women completing VET programs	◆ Module results ◆ Module completions
Increase in number of women with VET qualifications at all levels	◆ Course enrolments by qualification ◆ Course enrolments by stream
Women distributed more broadly across fields of study	◆ Course enrolments by stream ◆ Course enrolments by field of study ◆ Course enrolments by discipline group
Increase in participation and improved outcomes for specific groups of women	◆ All above indicators disaggregated on the basis of gender, age, country of birth, language spoken at home, disability, Aboriginal and Torres Strait Islander, geographic region, employment status
Higher number of women in management positions	◆ Destination surveys ◆ Labour-market analysis
Broader distribution of women across industries at various levels	◆ Course enrolment by field of study ◆ Course enrolments by discipline group ◆ Destination surveys ◆ Labour-market analysis

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In general, these indicators are all relative to some unspecified benchmark. The outcomes sought are 'increase in number', 'distributed more broadly', 'increase in participation' etc. While there is reference to ABS, DEET and NCVER data throughout the text of the strategy, there is no indication of whether the cited statistics are to be considered the baseline benchmark. Without the relevant benchmark, it would be difficult to determine whether the outcome had been achieved. For example:

Participation rates in VET for women aged 15-64

Year	Participation rate	
1995	9.7	Actual[20]
1996	9.0	Hypothetical
1997	9.3	
1998	9.5	
1999	9.8	

If 1996 were the benchmark year, every subsequent year would show increasing participation. If, on the other hand, 1995 were the benchmark year, the outcome would not have been achieved until 1998.

It would therefore seem desirable that the KPIs include either a reference benchmark, or a more precise wording of the outcome, e.g. an *annual* increase in the number of women.

Analysis of each key performance indicator

1

Module load completion rate is the only output measure in the current set of national performance measures for VET. For this reason alone, it assumes a particular importance as a measure of equity in outputs of the VET system at each level—national, State/Territory and provider.

Outcome	Indicator
Increase in the number of women completing VET programs	• Module results • Module completions

For this and other reasons, most States/Territories are attempting to improve the data comparability in relation to module completions. Differences in what constitutes 'completion' and what constitutes 'successful completion' hinge around the business rules applied by each State and Territory.

The general debate has focussed on the point at which a student is deemed to withdraw 'without penalty', when students are 'assessed failed','assessed results withheld', 'no assessment' etc., and which of these codes are included or excluded

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from the calculation of module load completion rates. There is little evidence that these analyses have considered whether:

- there are gender differences in module completion
- what these differences might tell us about exactly where interventions might be needed to improve women's completion rates

Thus, a much higher rate of women recording 'student assessed—failed' might suggest different strategies than a very high rate of 'withdrew without failure'. The former is suggestive of an intervention in the teaching/learning process and/or assessment processes, while the latter is suggestive of an intervention pre-enrolment.

2

Outcome	Indicator
Increase in number of women with VET qualifications at all levels	◆ Course enrolments by qualification ◆ Course enrolments by stream

While these indicators will signal the possibility of achieving the desired outcome, they are not sufficient to measure it. If the withdrawal or failure rates for women are high, the enrolment will not lead to a qualification at any level. The better indicator required to measure this outcome would be successfully completed AQF-recognised qualifications.

3

Outcome	Indicator
Women distributed more broadly across fields of study	◆ Course enrolments by stream ◆ Course enrolments by field of study ◆ Course enrolments by discipline group

The indicator 'course enrolments by stream' could be deleted from here without any loss of information in measuring the desired outcome. It could also be argued that 'course enrolments by discipline group' alone will provide the necessary indicator. This field, which has 13 branches of learning, can be disaggregated through different levels for interrogation, down to minor discipline group level, for example

Hierarchy	Code	Description
Branch of learning	**12**	Hospitality, tourism & personal services
Broad discipline group	**1202**	Tourism
Major discipline group level	**12021**	Travel/tourism
Minor discipline group level	**1202115**	Tourism management

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At the higher levels of aggregation, this field will provide a general indication of the distribution of female students/trainees. At the lowest level, the indicator can be used to identify whether, for example, all the women in 0602: Graphic arts/fashion design, are enrolled in 0602101: Graphic arts and design—general, or in 0602201: Fashion design—general. This would, in turn, indicate whether women are spread across the field of study or congregated in narrow aspects of it. Past indicators have shown that although women may be present in significant numbers in a branch of learning, they will often be confined to very few of the disciplines within that branch.

The success of this outcome would seem to require not only distribution across fields of study, but also within those fields.

4

Outcome	Indicator
Increase in participation and improved outcomes for specific groups of women	◆ All above indicators disaggregated on the basis of gender, age, country of birth, language spoken at home, disability, Aboriginal and Torres Strait Islander, geographic region, employment status

In order to gauge effectively whether this outcome had been achieved, it would be necessary to actually cross-tab the participation tables with the outcomes tables, or to calculate successful completion *rates*. If they are not considered together, the improved outcomes might simply be a product of increased participation.

> For example: *in 1998, 100 women enrol in library studies, and 80 of them successfully complete this course (i.e. successful completion rate of 80 per cent). In 1999, 150 women enrol in library studies, and 100 of them successfully complete this course. Both the enrolments and the completions have increased, but the successful completion rate has actually declined to 66.7 per cent.*

5

Outcome	Indicator
Higher number of women in management positions	◆ Destination surveys ◆ Labour-market analysis
Broader distribution of women across industries at various levels	◆ Course enrolment by field of study ◆ Course enrolments by discipline group ◆ Destination surveys ◆ Labour-market analysis

Both of these outcomes require a much longer-term perspective to measure achievement. We note that the statement of the strategy goal actually lists the four previous outcomes as contributing to these last two. Typically, destination surveys track students only in the year or two after their course completion. The impact on employment in management positions might take rather longer than this to present as a statistic. However, there may be some value in identifying those

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courses/modules that are overtly aimed at increasing/improving management skills and analysing any reported change of employment status for graduates of those courses/modules.

In summary, these performance indicators specified in the National Women's VET Strategy could, with some modification, be used to monitor participation and module outcomes for women and for the priority groups of women—to the extent that the individual student discloses membership of one of those priority groups. However, by themselves, they do not add much to the current tables produced for *Benchmarking VET*.[11]

Gaps in the strategy measures

There are two broad areas which the present key performance indicators do not address.

New business arrangements in VET

The National Women's VET Strategy was developed prior to some fundamental changes within the VET system. These changes include the introduction of New Apprenticeships, the development of the National Training Framework and the agreement of Ministers to a new set of planning and accountability arrangements. While each of these new arrangements will impact on the implementation of the strategy at State/Territory and provider levels, they do not diminish the continuing relevance of the goals and outcomes identified in the strategy.

However, there is one significant gap in the strategy which needs to be highlighted in the context of discussion of performance measures.

Expansion of employment-based training is a priority for all stakeholders under the new arrangements. It is in the interest of the national VET system, States/Territories and providers as well as clients of VET that this expansion provides opportunities for both women and men. Measurement of the growth and gender distribution of contracts of training under the New Apprenticeship arrangements will assume increased importance.

At the same time, the two general VET output measures related to modules completed and AQF qualifications attained will be joined by a third—units of competence attained. It will take some time for a system to be established through which units of competence can be validly measured and assigned a value. Nevertheless, this will become an important part of the suite of measures of equity for women.

Delivery strategy

Delivery strategy is a measure of activity, not of output or outcome. In a VET system concerned with equity of outputs and outcomes for women, the measurement of the activity or mode of delivery is itself of limited use. This is unless a causal link is suggested between a particular mode of delivery and a particular output or outcome for women.

As yet, there is very little quantifiable information on flexible delivery, as States and Territories are grappling with ways to define, measure and cost it. Nor are we aware of much real evidence at the present time to indicate that the benefits of flexible delivery to women are greater than those to men and, therefore, that flexible delivery has a gender-specific significance in achieving equity in outputs and outcomes for women.

Nevertheless, under AVETMISS, each module enrolment is tagged with a delivery strategy identifier.

Code	Description
01	Local class—scheduled, teacher directed
02	Remote class—scheduled, teacher directed
03	Self-paced—scheduled, local class organisation
04	Self-paced—unscheduled, multiple options
05	External—correspondence
06	Workplace—experiential learning
07	Mixed delivery—any combination of two or more strategies
90	Other

This indicator may be of value in considering each of the first four strategy outcomes. The field of delivery strategy would need to be cross-tabbed with course. This is due to the fact that flexible delivery is not yet a feature of all courses and any apparent gender differences may be attributable to differences in course enrolment rather than in mode of attendance.
Cross-tabbing delivery strategy with module outcome may also provide some assistance in determining ways of improving module outcomes for women. It should be possible to get an indication of whether module outcomes for women differ by delivery strategy, or whether women are more likely to be undertaking non-traditional study via one of the flexible-delivery strategies.

Recognition of prior learning (RPL) and credit transfer invite investigation of a number of issues to better understand the learning experiences that produce positive outputs and outcomes. In the first instance, there is a need to quantify and monitor any gender differences in the use of RPL provisions. The appropriate indicator comes from the module outcome field.

There is anecdotal evidence to suggest that women are accessing RPL provisions less than men. If the indicator substantiates this, there is a need for further inquiry. Is the process of having to request RPL presenting a barrier? Is the fact of having to pay for RPL assessment a barrier? Are the requirements of hours of attendance to qualify for Austudy a disincentive to seeking RPL? This is a good example of where VET census data would need to be followed up by specific research activity.

Similarly, students/trainees granted credit transfer might be of interest in gaining some insight into learning pathways and again whether there are gender differences.

One further set of indicators not considered in the KPIs in the National Strategy for Women in VET are those relating to the employment status of students/trainees. As employment-based training increases, and innovation in modes of training delivery increases, it will be important to consider any gender differences in the employment patterns of students/trainees. If part-time and casual work are more the norm for females, then strategies such as delivering parallel classes at different times on different days may be more likely to enhance retention than increased technology for self-directed learning.

Before leaving this section, we wish to consider the role of indicators. They do precisely as they say. If properly used, they indicate whether there is a difference between one set of figures and another. For example, those for men and women, those for Aboriginal women and those for other women, those for women from a NESB and those for men from a NESB. By themselves, indicators do not explain difference, nor are they particularly helpful in identifying appropriate action to minimise or eliminate unwanted differences.

Other considerations

In reviewing current measures of equity for women in VET within both general measurement and measurement of special programs, we have identified a number of generic issues which require clarification before a set of equity measures for women can be proposed.

Accessibility and timeliness of data

A number of States/Territories indicated to us that they experience difficulties accessing data on which to base analysis of equity for women and to plan appropriate improvement strategies. Further, there were indications that there is a problem in that systemic data is not available for a particular year until March of the following year. This means that by the time analysis is undertaken and strategies are developed, the implementation is based on data that is already at least two years old.

We believe that there are a number of resource issues here.

There is a wealth of data that providers and systems collect that currently remains largely unused. Any table in the annual VET collection could be produced by gender. In some systems, there is a problem of accessibility such as access protocols or stand-alone provider systems that restrict who can actually see and use what data. However, the main difficulty appears to be the deployment of resources and not the existence of data.

Data manipulation and analysis are resource intensive. Where centralised statistical services exist, they are largely consumed with activity related to profiling and the annual VET collection; they tend not to have expertise in the

issues of equity. Where specialised women's units exist, they are largely consumed with policy or program activity; they tend not to have expertise in statistical analysis.

Given these practical limitations, it is therefore important that any performance measures for equity are simply derived and easy to analyse. We have therefore been mindful of these resource issues in our suggested approach to measuring equity for women in VET.

Past trend analysis v. forecasting and planning

Almost all analysis of gender equity in VET has been based on the VET census data. It looks at past trends and measures current performance against these trends. The collection has been based on input measures of activity and participation. There has recently been attention paid to some training outcomes with the student destination and employer satisfaction surveys. The data tells us very little about a lot of students/trainees. Planning based on these data represents a somewhat traditional approach.

There have been relatively few sample surveys seeking either quantitative or qualitative data from fewer respondents but in more detail on specific issues. There has been almost no analysis of the experiences of female students/trainees undertaking training, or of their learning pathways and learning outcomes. We have been unable to identify any planning approach that is based on modelling and forecasting.

If the implementation of strategic plans is based on data which is two years old, there is a very real possibility that opportunities for improvement presented by short-term shifts in either employment or training demand will be missed. As an example, the National Women's VET Strategy, just now being implemented at State/Territory level and yet to impact at provider level, needs refocussing to take account of New Apprenticeships and the new business arrangements for resource agreements. Without more detailed understanding of the effectiveness of particular interventions, there is the possibility that the best strategies may not yet have been adopted, or that ineffective strategies continue to be funded.

We note that a number of States/Territories have discontinued their Tradeswomen on the Move programs because they did not seem to be effective in increasing women's participation in trades courses. However, this decision appears to be based on an observation of continuing low participation rates, rather than any deeper understanding of what it was about the program that did and did not work. Did it, for example, increase interest in trades? Did it result in more enquiries which did not come to fruition in enrolments? Did application rates increase but not enrolments? Was it too dependent on employers offering apprenticeships to women? Were other young women put off by a perception that 'enduring' a male-dominated workplace and training organisation was too difficult, or by anecdotal evidence that the female drop-out rate was high?

Unless we begin to build a capability to answer these questions, we may repeat the apparently limited success of this strategy in other programs. We suggest that

such understanding requires a research/survey approach, rather than an analysis of VET census data participation rates.

Non-traditional training and threshold values

There has been long-established interest and effort in increasing women's access to and participation in courses and training programs described as 'non-traditional'.

In the school sector, the focus has been on maths and science and the many industrial technology areas. In the higher education sector, the focus in the 1970s and 1980s was on medicine, law, the sciences, and engineering. In the 1990s, engineering remains the only field of study now with female participation below a 40 per cent threshold.

In the VET sector, the 'non-traditional' focus has been on trades other than hairdressing, and on some of the para-professional technical areas such as information technology and engineering. The criteria for the 'non-traditional' label was that female participation was 'low'. The trades represented the sole access to structured training arrangements; that is, a paid job for at least the length of training and paid time to attend off-the-job training. The technical areas in the late 1970s and early 1980s represented growing employment opportunities and often cadetship arrangements, at least after the first year of training. That the majority of these desirable 'paid' training places were occupied by young men was considered inequitable and led to efforts to increase women's access to non-traditional fields of study.

In the higher education sector, the concept of a *threshold* has been used to focus attention on and define non-traditional areas of study.[2] The *threshold value* is the participation rate for an identified group which divides a course of study into traditional or non-traditional. The actual value at which the threshold is set is somewhat arbitrary. In Martin's study[3] it was set at 40 per cent, so that any course with less than 40 per cent female enrolment was defined for the purposes of the study as non-traditional. There has been much discussion about whether the threshold is too high at 40 per cent and should be set at 35 per cent, or whether it is too low at 40 per cent and should be set at 50 per cent.

While the use of the concept of a threshold value may be of some benefit in the VET sector in focussing effort, it is our view that it adds little to benchmarking performance. The concept of 'traditional/non-traditional' is itself a relative concept. Over time, female participation in a course may move from below the threshold to above and so the course is no longer considered non-traditional for women. However, it may be that the participation rate for women from NESB in that course has actually dropped from 10 per cent to 3 per cent.

Without consideration of other dimensions, the concept of traditional/non-traditional does not lead to any useful measure of performance.

We believe that the National Women's VET Strategy already adequately focusses effort through the following:

All industry but in particular ...

- industries where women are a high percentage of the workforce
- growth industries where women are a low percentage of the workforce
- currently emerging industries[24]

If there is any lack of precision, it is in defining a 'growth' industry and an 'emerging' industry, and this does warrant further attention. We believe that it is a national responsibility to provide an annual list of growth and emerging industries. It is a State/Territory responsibility to customise that list for the labour market in a particular State/Territory. Providers can then prioritise effort according to the local labour market and the demand for training from women in those industries.

Population share as reference value

Reference values refer to a *relevant population* for comparison purposes.

For example, if we wanted to look at VET participation rates in Region X: *if 52 per cent of the population of Region X is female, then the reference value for women's participation in VET in Region X would be 52 per cent; and if the ATSI population of Region X was 23 per cent then the reference value for ATSI participation in VET would be 23 per cent.*

It is our view that reference values are a basic foundation for equity strategies. In relation to participation, they provide the information that describes the pool of potential VET students/employees and allow for general strategies to be customised by particular providers. Thus, while the proportion of the national population that identifies as ATSI is 1.5 per cent[25], it might be considered equitable if 1.5 per cent of all VET students in Australia were ATSI. However, the Northern Territory could not claim to have an equitable provision if their ATSI participation rate was 1.5 per cent of VET students, since the Northern Territory's ATSI population is 22.8 per cent of the total population. Further, for some of the remote Northern Territory providers, the reference value would be far higher than 22.8 per cent.

We conclude that it is desirable to establish appropriate reference values for relevant populations of women at national, State/Territory and provider level to more effectively customise general strategies to achieve equity for women.

Targets

The question of institutional targets is a sensitive one within VET at the present time. In our discussions with States/Territories, we noted a conceptual reluctance to endorse equity targets for women although the application of targets in other areas of delivery and management is widespread. At least two States indicated to us that while targets were used in a variety of other contexts to achieve performance improvements, equity targets would be unacceptable. The arguments against targets ranged from paucity of data and lack of comparability; to frustration with accountability systems that have targets but no reporting

requirements; to a sense of the futility of setting targets without any actual or implied sanctions for not meeting them.

As targets are a fundamental concept in performance measurement, we consider it useful to explore and comment on some of these issues.

- **Data validity and comparability**

  Over the last two years, there has been much improvement in the comparability and validity of the VET statistical collection. Efforts continue to improve this still further. That there are still some inconsistencies is not sufficient reason to dismiss concepts of targets. The key is to set targets within the framework of known data limitations. For example, if student results sheets are slow to record course/module completions, a key strategy may be to improve the results recording process. Until this strategy is achieved, it may be desirable to delay the date of data collection so that the completions are a truer picture of outcomes than at present.

  We do not believe that the current data issues are sufficient to exclude targets as a strategy.

- **Targets not quotas**

  There is a lingering apprehension that targets mean the reservation of student places for particular groups, where the individual's eligibility for the place is determined solely on the basis of group membership rather than on any academic criteria. Further, that the place once reserved cannot be taken by a non-member student if there are insufficient applicants from the particular group. Such systems of reservation have generally been called *quotas*.

  In the VET system, two types of targets have been apparent. There are those which set actual numbers of places, or hours to be delivered; e.g. a 10 per cent participation rate for women in non-traditional trades. These targets are *blanket targets*, which run across systems and providers regardless of either current performance or population base. Blanket targets are not generally useful, as they may be achieved easily by some, while others fail despite every effort.

  The other manifestation of targets in VET is in the continuous improvement context which seeks a percentage increase on existing performance; e.g. a 50 per cent increase in RPL assessments. These targets are *relative targets* based on an assessment of how much improvement might be expected of a particular system or provider, based on current known factors or aspiration.

  It is our view that the concept of relative targets has merit once the appropriate reference values are determined. States/Territories and providers need to have some measure of control over setting the improvement levels relative to their priorities for strategic intervention. There is little point in setting a relative growth target of 10 per cent if, without any intervention, growth is currently at 15 per cent. Similarly, there is little point directing effort to increasing women's participation by 30 per cent in biotechnology courses if they already represent 85 per cent of the students. However, if women represent 85 per cent of the enrolments but only 35 per cent of the

completions, the target might well be to improve the completion rate for women by 50 per cent.

- **Targets without reporting requirements**

  In many of our discussions, we were struck by concepts of a one-way accountability flow; that is, from provider to purchaser/government. A number of States/Territories have equity targets or measures in the performance/resource agreements with providers. However, the requirement to account to government for effort or achievement on these measures is less apparent. For this reason, it was frequently argued that the targets were useless.

  It is our view that there is another area of accountability in VET, namely from provider to client. Equity targets or measures are part of a quality assurance regime informing clients that what is available and delivered is done so equitably. It could be argued that it is of more value to the client, than to government, to know that a particular provider or system is attempting to improve learning outcomes in a particular way (e.g. by increasing RPL).

  Taken one step further, reporting performance in the marketplace by way of self-promotion and/or advertising could be of immense value to the provider itself. Private providers have long utilised successful outcomes for their graduates as a competitive edge. Reporting strategies and achievement in the area of equity targets might also be of value for publicly funded VET outside the current government reporting requirements.

- **Targets without sanctions**

  It was put to us that targets without sanctions for non-achievement were of little value. Sanctions mentioned were either of the financial variety, e.g. loss of funding; or of the public opprobrium variety, e.g. announcing that the following providers/States/Territories did not meet their equity targets.

  It is our view that financial sanctions for not meeting planned equity targets would not be acceptable at national, State/Territory or provider level. It is also our view that public opprobrium via requirements to report to government and the publication of those reports is not particularly effective in achieving real improvement in equity measures. Legislation sometimes requires the lodgement of EEO reports by the private sector and the naming in Parliament of non-complying companies. However, there appears to be little tangible evidence that such public sanction effects real improvements in equity; it merely improves reporting processes.

  There is an old saying that 'success breeds success'. Put another way, there is common acceptance of the notion that positive reinforcement, of a monetary nature or any other kind, is the best way of changing behaviour. Rather than seeking sanctions for 'bad' behaviour, we suggest that there be a search for new ways of rewarding 'good' behaviour; i.e. that there be benefit attached to achieving planned equity targets.

  It may be that a provider who has achieved their equity target in the information technology field is 'rewarded' by the allocation of resources on a

slightly higher unit cost basis for a period of time in a program of their choosing. The success of such a shift in focus from punishment to reward would be dependent on: some degree of provider control; the identification of rewards that providers see as valuable; and agreement on the 'value' of achieving particular targets.

In summary, it is our view that targets, or planned versus actual performance, are a standard feature of VET in the 1990s and for the forseeable future. They underpin all resource agreements and performance agreements at national, State/Territory and provider level. The challenge is to set realistic targets that will result in real improvements in equity outcomes.

Chapter 3: Future directions

Based on our understanding of the context in which measures of equity for women need to be considered, and on our analysis of current approaches and likely future directions, our proposals for the future fall into three parts:

- principles to guide measurement of equity for women in VET
- measures for the short term
- preparing for the longer term

Principles to guide measures of equity for women in VET

The task facing the VET system at all levels is to select a set of measures of equity for women which can be used for the purpose of accountability and resource allocation or performance improvement, including improved planning.

To give greater clarity, precision and direction to the development and use of measures of equity for women, we suggest there needs to be agreement at all levels about some fundamental principles. Some of these relate to characteristics of good performance measures generally. Some relate to general measurement in VET and yet others relate specifically to gender equity.

Principles

1 Nationally agreed measures of equity for women should be limited in number.

2 Measures should be simple, well-defined and easy to use.

3 Measures should be durable, permitting time series analysis and reporting.

4 Agreed measures should be available at each level in the VET system for the purpose of
   - public accountability
   - resource allocation
   - performance improvement

5 Agreed measures should relate to the major policy priorities for achieving equity for women in VET.

6 Measures should include participation of women but should have their primary focus on the measurement of outputs and outcomes.

7 Agreed measures of equity for women should be derived primarily from VET census data and the VET Periodic Survey, supplemented by data derived from external sources and by tightly targeted qualitative and quantitative research.

8 Where measures are used as targets, the targets should be relative targets and not blanket targets.

9 Reporting on performance of the Australian VET system against agreed measures of equity for women should work towards international comparisons of performance.

Two-pronged approach to change is needed

As performance measures in VET are currently being fundamentally reviewed, it is likely that 1998 and perhaps 1999 will be a transition period. During this period, new measures will be developed and applied within the VET system at national, State and provider level. At the same time, a new national strategy will be developed for 1998 which will have implications for performance measurement arrangements.

We therefore believe that the VET system should make some short term improvements in current measures of equity for women for application in 1998 and possibly continuing through 1999. At the same time, it should plan the introduction of new measures of equity for women to coincide with the introduction of new general measures for VET.

Measures for the short term

In the general VET system at national level

To better measure equity for women, *Benchmarking VET* should report by gender on the following measures for 1996 data.

Indicator	Performance measure
Outcome	Graduate destination Graduate satisfaction
Output	Module load completion rate (MLCR) aggregated to State/Territory level and reported in comparison to all students/trainees *
Output	Qualification completed aggregated to State/Territory level and reported by AQF level * #
Activity	Participation rates disaggregated on the basis of gender for: age, country of birth, language spoken at home, disability, Aboriginal and Torres Strait Islander, geographic region, employment status, aggregated to State/Territory level, reported against State/Territory population representation*

Note:

* These measures are not currently reported on in *Benchmarking VET* but are readily extracted from the existing VET collection

This measure should not be used for interstate comparison purposes until such time as States/Territories are satisfied on the question of comparability.

In the National Women's VET Strategy

We believe that the measures specified in the National VET Women's Strategy could be improved significantly with some relatively minor adjustments. The changes which we propose in the following table incorporate the general VET measures proposed above. They also add some measures which are of specific relevance to the broad policy outcome being sought in the strategy at each level of the system.

There are, of course, many other measures that could be used. We have applied the principle that nationally agreed measures should be limited in number, but this does not preclude States/Territories or providers developing and using additional measures. However, any additional measures should be designed to shed further light on gender differences identified by the agreed measures. They should also assist the identification of particular intervention strategies likely to achieve demonstrable improvement in performance against the agreed measures. If this discipline is not applied, the field of equity for women will be strewn with a wide range of measures which become increasingly incapable of focussing effort, changing behaviour or improving performance. Measurement will overwhelm interpretation and use.

Proposed changes to key performance indicators in the national women's education & training strategy

Policy outcome	Indicator(s)	National interest	State/Territory interest	Provider interest
Women distributed more broadly across fields of study	❖ Module enrolments by discipline group	Aggregated to State/Territory level, reported at branch of learning level	Reported at branch of learning level, by provider	Reported at major discipline group level
Increase in the number of women completing VET programs	❖ Module outcome ❖ MLCR	Aggregated to State/Territory level, reported in comparison to all students/trainees	Reported by provider in comparison to all students/trainees	Reported by branch of learning, by delivery strategy, and in comparison to all students/trainees
Increase in number of women with VET qualifications at all levels	❖ Qualification completed	Aggregated to State/Territory level, reported by qualification category	Reported by provider by qualification category	Reported by branch of learning and by delivery strategy
Increase in participation and improved outcomes for specific groups of women	❖ Above indicators disaggregated on the basis of gender, age, country of birth, language spoken at home, disability, Aboriginal and Torres Strait Islander, geographic region, employment status	Aggregated to State/Territory level, reported against outcome for all women students	Reported by provider against outcome for all women students	Reported by branch of learning, against outcome for all women students
	❖ Participation rates for these groups	Aggregated to State/Territory level, reported against population representation	Reported by provider, against population representation. In metropolitan areas, it may be necessary to have a standard population measure	Reported by branch of learning

Preparing for the longer term

A new framework and new measures for the national VET system

The new set of key performance measures for the VET system will probably be finalised by the end of 1997 and a period of transition to the new arrangements will be required. In both the planning and implementation period, particular attention to measures of equity for women in VET will be necessary.

As discussed in Chapter 1, the framework which is currently under consideration appears sound, in that the three proposed effectiveness measures of:

- outcomes
- skill outputs and
- student participation

are each capable of disaggregation, interpretation and reporting by gender.

We do, however, reiterate our concern with the assumption that equity for women is an outcome for individual students/trainees only and not for the nation or employers.

Unintended consequences

We support the use of skill output measures of completion of AQF qualifications, units of competence and modules of training. However, a move to extensive use of completion data increases the significance of measures of equity in assessing the total performance of a VET system or institution.

In a perfect market, the purchase of 'successful training completions' would involve the purchaser setting a unit price for completion. Theoretically, this unit price would be set to allow training delivery for those students/trainees who complete with an average amount of inputs, less than the average inputs and more than the average inputs. As markets are less than perfect, a financially pressed provider might be tempted to shift its selection policies to achieve a greater proportion of students/trainees likely to complete with the least amount of inputs.

We simply do not know whether women, as a group, require more, less or the same inputs as men to achieve successful training completion. Thus, it cannot be assumed that training for women is more expensive than for men, although this is highly unlikely. What we do know is that some women, such as women with little formal education or without adequate literacy and numeracy skills, are likely to require additional input to achieve successful outcomes; that is, their training may be more expensive.

Therefore, in the shift to completion measures, close monitoring of the consequences for women's overall participation in VET will be essential to ensure equity in access.

Efficiency

We also think it is time that matters of efficiency and not simply effectiveness are considered, specifically in relation to special initiatives for women. We are conscious of the danger that by raising this question of efficiency, we provide an opportunity to question the allocation of resources for special initiatives for women. Nevertheless, efficiency in the allocation of public funds is important for accountability, resource allocation and performance improvement. Thus, it should not be overlooked in considerations of measurement of equity.

Over the past 15 years, there has been considerable effort and expenditure to increase the participation of women in VET through special initiatives. As attention shifts from inputs (participation and activity) to outputs, there is a growing unease around Australia as to whether this expenditure has actually delivered more equitable outcomes for women. The direct relationship between expenditure on gender equity initiatives and equitable outputs is a largely unexplored field.

It is apparent that there is little known about the experience of women once involved in VET. There is a need to be able to answer questions such as: why some women enrol in courses/modules but do not take up their place; why women leave courses before completing them; why some women choose not to participate in final assessment events; and what happens to women who have VET qualifications. Not only do we need to know this information about women as compared to men, we also need to discover what aspects are common to all groups of women and what, if any, differences there are for women from particular groups. These groups include ATSI, NESB, women with disabilities, rural and remote women and women in transition.

There is a need not only to measure the outputs and outcomes specifically for these groups, but also to begin to measure the most efficient means of achieving equitable outcomes.

In a purchaser/provider model, the purchaser buys equitable outputs or outcomes for public accountability purposes. The key question is whether purchasing special courses for women is the most efficient means of producing the desired outputs and outcomes. Alternative strategies could be purchasing additional support or changes to the teaching/learning methods of the mainstream, purchasing increased effort in RPL, or purchasing alternative technologies. It is likely that the answers will be different for each of the target groups, and for different programs in different industries.

At the present time, we do not have measures or models which permit informed choices about the most efficient way to achieve equity in output or outcome. This question of efficiency is of interest at all levels of the VET system. For that reason, we see value in the co-operative development at a national level of measures, models or systems by which a purchaser (be it ANTA, a State/Territory or provider) could make an informed choice about the training product which can produce most efficiently outputs and outcomes for women.

Establishing a comprehensive baseline

The 1996 ANTA report *Participation and attainment of individual client groups within vocational education and training* aimed to provide baseline participation and attainment information for, inter alia, women. We consider this to have been a good but insufficient start.

There is a need for resources to be committed to an exhaustive analysis of existing VET data by gender, down to provider level, to serve as a baseline benchmark and provide a comprehensive picture of past trends and current participation and activity of women in VET. This exercise probably needs to be done once every five years. There is some conjecture that women's falling participation rates in VET are accounted for by the rise in their participation in higher education and employment. The only way to test this is to place the VET analysis in the broader context of women's post-school experience.

This cyclic approach would mean that in other years, effort could be directed to both modelling and forecasting, as well as sample survey work on relevant issues. We believe that such an approach may help to overcome some of the problems associated with time lag between data collection and analysis, and implementation of strategies based on that data.

In the National Women's VET Strategy

An alignment between the baseline report proposed above and the final evaluation of the current strategy should be established, with the baseline report providing major input to the evaluation and development of the next strategy. To get this alignment, the baseline report would need to be published in 1999, using 1998 VET data.

Conclusion

Because the performance measurement area in VET at the present time is extremely fluid, it presents a significant opportunity to make immediate improvements to current measures. In addition, it could develop measures which will assist VET stakeholders at each level of the system to achieve equitable outcomes for women. Once there is clarity, precision and agreement on the most useful measures, attention can then focus on the more important task of using them in ways which actually assist VET stakeholders to deliver better outcomes to women throughout Australia.

Recommendations

For the national VET system

1 To give greater clarity, precision and direction to the development and use of measures of equity for women in VET, it is recommended that the nine principles outlined on p.31 of the report be endorsed by the MCEETYA VEET Women's Taskforce.

2 To improve the reporting of performance measurement of equity for women it is recommended that *Benchmarking VET:*

- include gender as a variable in reporting MLCR
- include gender as a variable in reporting participation by age, ethnicity, disability, aboriginality, geographic location and employment status
- add a new table: qualification completed by AQF level and by gender

3 To ensure the completeness of the proposed new framework for measuring the performance of the national VET system, it is recommended that the MCEETYA VEET Women's Taskforce initiate discussion with ANTA on the principle that equity is of as much importance 'to the nation' and 'to employers' as it is to the individual student.

4 To improve the utility of the KPIs in measuring the effectiveness of the National Strategy for Women in VET, it is recommended that the indicators be amended as proposed on p.34 of the report.

5 Until further work is done to develop measures of the New Apprenticeship arrangements, it is recommended that there be two additional indicators in the National Strategy for Women in VET to assist in identifying the extent to which workplace t aining is accessible to women. These are:

- employment status
- delivery strategy

6 To guard against unintended, undesirable consequences for women from the focus on completions and unit cost, it is recommended that participation and outcomes be closely monitored.

7 To improve the efficiency of equity strategies, it is recommended that the MCEETYA VEET Women's Taskforce supports a comparative research program to identify which strategies, under what conditions, produce the most effective improvement in equitable outcomes for women.

8 To establish valid and reliable reference values from which to set targets and measure improvement, it is recommended that every five years there be a comprehensive analysis, by gender, of all collected VET data.

9 To inform the development of the next iteration of the National Strategy for Women in VET, it is recommended that the baseline data analysis be conducted on the 1998 VET data, for publication in early 1999.

For State/Territory systems

10 In order that providers are able to establish reference values for relevant populations, it is recommended that States/Territories provide access to relevant data and assistance in its interpretation.

11 To better focus equity efforts at provider level, it is recommended the strategy's stated industry priorities:

- industries where women are a high percentage of the workforce
- growth industries where women are a low percentage of the workforce
- currently emerging industries

are more clearly defined and given more prominence.

12 To encourage provider efforts to improve equity outcomes for women, it is recommended that State/Territory systems give consideration to methods of 'rewarding' providers who achieve their equity targets. Such methods should be based on identifying rewards seen to be of value by providers. They might include additional funding for special initiatives, or preferential funding on a unit cost basis for a module the provider wishes to enhance.

As information becomes available from Recommendation 7, decision making about 'rewards' should become more transparent.

For providers

13 Within the framework of the national strategy and performance/resource agreements between State/Territory training authorities and providers, it is recommended that providers set equity performance targets for women which are referenced to their own populations, industries and educational profile. For metropolitan regions serviced by multiple providers, it may be desirable to have common reference values.

Notes

1 Steering Committee for the Review of Commonwealth/State Service Provision 1997, *Report on government service provision 1997*, AGPS, Canberra, vol. 1, p. 11

2 *Ibid.*

3 Based on Association of Universities & Colleges of Canada 1995, *Research File*, vol. 1, no.2, June

4 This concept of contractual accountability has been developed by the Allen Consulting Group, 1997

5 Steering Committee for the Review of Commonwealth/State Service Provision 1997, *op. cit.*

6 *Ibid.* p.xxiii

7 *Ibid.* p.12

8 This is the case in Western Australia

9 ANTA 1996d, *Benchmarking VET*, Brisbane, July

10 Smith, M & Ewer, P 1995, *The position of women in the National Training Reform Agenda and enterprise bargaining*, DEET, AGPS, Canberra

11 Drawn from Allen Consulting Group 1997, *Output and efficiency measures for vocational education and training*, final report to ANTA Performance Review Committee, May, pp.18-19

12 From papers for the Performance Review Committee meeting, 22 April 1997

13 ANTA 1996d, *op.cit.*

14 Steering Committee for the *Review of Commonwealth/State Service Provision* 1997, *op. cit.*, pp. 119-70

15 Table 4A.20: Proportion of graduates from nominated target groups 1995, *Ibid.*, p.160

16 ANTA 1996c, *Participation and attainment of individual client groups within vocational education and training*, May

17 See for example Statistical Services Unit 1996, *Statistics newsletter*, NSW TAFE Commission, June

18 See for example Research Branch 1997, *Apprentice and trainee statistics for the month of February 1997*, DVET, Tasmania

19 See for example DVET 1996, *Performance goals for target groups*, final report, Tasmania, October

20 ANTA 1996d, *op. cit.*

21 *Ibid.*

22 Martin, L M 1994, *Equity and general performance indicators in higher education*, AGPS, Canberra

23 *Ibid.*

24 Australian National Training Authority, 1996a, *National Women's Vocational Education and Training Strategy*, ANTA, March, p.2

25 ABS, 1995 data

Appendix 1

Review of literature

In this appendix, we provide a brief overview of Australian and international literature on performance measurement in VET, schools and higher education as it is relevant to measures of equity for women. The literature reviewed is a mixture of policy documents and research reports, obtained through an NCVER literature search, Internet browsing and documents supplied during our consultations. We have attempted to group this eclectic collection of materials according to the content focus, rather than by type of document or chronologically.

1 Performance measurement in VET

Literature with a focus on equity

The *National Women's Vocational Education and Training Strategy*[1] has been developed to meet an equity goal in the National Strategy for VET.[2] It builds on the work of the earlier *National Plan of Action for Women in TAFE*[3], and the many research projects that have informed practice in improving women's access to and participation in education and training. While the earlier plan was focussed on TAFE, the current strategy encompasses all of VET.

The National Plan of Action listed the following performance indicators for identifying progress towards achieving the objectives:

- *Students*—the ratio of women to men in accredited TAFE courses

  This will be calculated by:

  - subject and course enrolments
  - student contact hours
  - subject and course completion rates and awards granted
  - graduate employment and further study (by survey)

  This will occur in:

  - all streams and fields of study
  - programs and schools where women are under-represented
  - new or additional courses developed in areas of growth and change

- *Resources*—the proportion of resources allocated to mainly (60%+) male, and female study areas

- Staff[4]

  - the ratio of women to men employed in management positions in TAFE
  - the ratio of women to men on decision-making bodies in TAFE
  - the ratio of women to men in all staff development exercises[5]

The National Plan of Action was evaluated in 1994 with a view to assessing its effectiveness and to assess the outcomes of projects towards meeting the plan's targets. The evaluation report[6] identified both strengths and weaknesses in the plan of action. Major failures included lack of data and lack of reporting on progress and targets that were difficult to quantify and therefore to assess. The report proposes a realistic timeframe for implementation, clearly defined priorities, a hierarchy of outcomes and the need for an annual planning and reporting cycle. One lesson to be learnt from this evaluation was that 48 national targets translated into 138 prioritised State and Territory targets, which made an overall assessment of progress exceedingly difficult.

With lessons well learnt, the current national strategy is greatly simplified. The goal is:

> *A measurable change in the profile of women accessing and completing programs of Vocational Education and Training*[7].

It identifies four outcomes by which the success of the strategy will be measured. It proposes that these outcomes will effect changes in the employment profile of women in that there will be more women in management positions and more women widely distributed across industries at various levels. The strategy nominates six focus areas:

- continuous improvement measures
- training and staff development
- standards development, curriculum, delivery and support services
- pathway planning through skills recognition
- balanced representation
- promotion and publicity

By way of assistance to systems and providers, ANTA produced the *National Women's Vocational Education and Training Strategy—An implementation guide.*[8] This guide is in three parts: Part 1 describes the strategy; Part 2 discusses the background to the strategy and the rationale for its outcomes and priorities; and Part 3 presents possible approaches to implementing the strategy at systemic and provider level and includes a model action plan.

State systems have taken the national strategy and have begun to develop their own strategic plans within the context of State policies and priorities. New South Wales, for example, has produced the *NSW State program of action for women in TAFE 1997-2000.*[9] This strategy contains an adapted version of the summary of focus and strategies contained in the national strategy and a detailed set of activities to be undertaken within each of the six focus areas.

It sets out its performance indicators in the following way.

Access

Activity measure

- enrolment rate

Provision

Input measure

- pathways by previous award completed

Activity measure

- student contact hours

Output measure

- module completion rate

Appropriateness

Outcomes measure

- satisfaction—measured by surveys

South Australia has developed an *Access and equity strategy*[13] to provide the framework for the equity outcomes of the State training profile. This strategy has been cast within a best-practice framework comprising ten levels, and the specific target groups benefiting from each strategy at each level. The goal for gender equity is that 'women will access, and benefit from, the full range of vocational education and training services.' The key performance indicators it seeks for women are:

- increased participation in, and completion of, accredited vocational programs
- a specific increase in participation in programs where women comprise less than 40 per cent of student numbers.

Victoria, by way of contrast, has moved to replace its practice of negotiated targets for specific groups with a policy of *Managing diversity*.[14] This policy identifies six principles:

- valuing diversity
- access to and effective participation in vocational and further education
- an outcomes focus on performance
- responsiveness to clients with special needs
- reporting on achievement
- managing diversity—as a corporate responsibility

There are four desired outcomes for this strategy:

- Government-funded providers and other agencies of the State training system demonstrate implementation of vocational and further education policies, practices and services that are responsive to the needs of their diverse clients.
- Clients of the State training system are able to access and participate effectively in vocational and further education programs, irrespective of gender, culture, age, location, disability or disadvantage.
- Individuals who successfully complete their education and training in State training system programs reflect not only the diverse composition of the Victorian community, but are also able to contribute more productively to society.
- Clients of the State training system are able to exercise choice in the vocational and further education they receive.

Each provider sets its own targets and performance measures which form part of the performance agreement. Service standards which require yearly reports on progress towards managing diversity are the mechanism for monitoring the performance of providers.

Participation and attainment of individual client groups within vocational education and training[12] sets out to provide baseline participation and attainment data for four equity target groups in VET. Women are one of these target groups and Chapter 3 is devoted to providing baseline data for their participation and attainment.

This report contains population and labour-force analysis, including participation in post-compulsory education. It has State-by-State analyses of participation in TAFE training. The analyses of commercial training provision and employer-based training are for Australia. Analysis of outcomes is restricted to module results by discipline group for Australia, and tables from the Graduate Destination Survey. The State-by-State analyses contain no outcomes data. It is a useful starting point from which to measure change, but does not go sufficiently far to be used as the baseline from which the success of the national strategy might be measured.

Performance goals for target groups[13] is the report of a project aiming to establish baseline information and goals by which progress to improve target group participation in VET could be monitored. The focus of the report is on participation but it contains two interesting additions. These are an analysis of women's participation in remote areas and some analysis of longitudinal surveys of women's pathways following access and entry courses.

Equity 2001[14] is informed by *A stocktake and analysis of access and equity reports in vocational education and training, 1990-95*[15], which was an analysis of the recommendations of 60 reports on access and equity in the period under review. *Equity 2001* provides a set of principles to underpin the policy framework and it sets targets for outcomes.

It recommends the following outcomes for women by 2000:

- *Increase the participation and attainment rates of female operative level employees, in structured and accredited training across all industries (particularly emerging industries), to a level which is proportionately equal to that for their male counterparts.*
- *Participation and attainment rates in skilled and professional/para-professional level courses, on a par with males, across all industries*[16].

Of particular interest is the report's statement about resource allocation for equity:

> *5.8 It is recognised that there are additional costs in delivering training to groups under-represented in vocational education and training. This can range from costs because of literacy, language and numeracy needs; to the costs of remote or rural delivery; to meeting a physical disability; child care support; or providing support for a student or employee who is in a very different environment.*

Outcomes by 2001	Possible strategies
• Funding arrangements take account of differential funding requirements for successful outcomes by individual client groups.	• Basic unit costs established for students with differential levels of support needs.
• Funding provided on an outcomes basis either to individual clients or employers to choose the off-the-job training which suits the needs of the individual.	• Key agencies responsible for funding VET, review funding guidelines and develop approaches to ensure recognition of differential costs.
• A shift towards provision of long-term program funding for programs designed for disadvantaged clients, in order to provide for continuity and the ability to plan for long-term improvements in training outcomes.	• Evaluate efficacy and equity of current user-choice arrangements and, where necessary, make adjustments.

Barnett and Wilson (1995)[17] undertook a comparative, equity-focussed study of commercial and community training providers to ascertain the extent to which the private sector trainers were concerned with equity. They profiled the providers using a number of measures which included:

- course structure
- course timetabling
- course promotion
- targeting of special groups
- student enrolment data

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They were also concerned with attitudes of providers towards equity-related issues, and for this they surveyed providers'

- adoption of access and equity policies
- adoption of anti-discrimination policies
- provisions made to enhance women's access to courses
- level of priority attached to equity issues

Smith and Ewer (1995),[19] examined the position of women in the National Training Reform Agenda and enterprise bargaining through a quantitative analysis of 1029 federal enterprise bargaining agreements registered between May 1991 and July 1993. Their analysis considered 51 items relating to enterprise agreement provisions such as sexual harassment, spread of hours, sick leave, recognition of family responsibilities, etc. Part B of the analysis (items 20 to 32) contains items related to access to training and related conditions. Its recommendations about training provisions may be useful to anyone examining equity and New Apprenticeships.

There are two other reports of interest on measuring equity. The first *Recognition and resource audit—gender perspective*[20] is notable for its efforts to address the equity issues in resource allocation and expenditure, as well as its comprehensive analysis of student selection to courses and RPL and credit-transfer practices. The second is *Organising a fair go*[21], which evaluated the Victorian Negotiated Targets Strategy against comparable practice in other States and Territories. This report is a useful blend of qualitative and quantitative measurement to assess the effectiveness and efficiency of a specific equity initiative.

The most recent contribution to establishing a conceptual framework for measuring equity for women is Butler's 'Beyond political housework: Gender equity in the post-school environment'.[22] Part 1 of this paper places gender equity in context, reviewing the literature and critiquing the debates about equity and equality, about equity in education and work, and the issues of category politics. Part 2 considers post-school education and gender equity with particular attention to VET. It provides a critical analysis of major policy directions and program interventions that have attempted to improve equity for women.

'Political housework' refers to 'tidying up the mess other policies have left behind'. Butler makes a strong plea for now to be the time of 'gender equity work', new strategic alliances, new conceptual tools, clarification of terminology and vision and courage.

Literature with a focus on performance measurement

The Boston Consulting Group's *Review of implementation of performance measurement in VET*[23] identified problems and recommended solutions in relation

to the consistency of data collected by States and Territories against four key performance measures for the VET sector. They were:

- planned versus actual student contact hours
- module completion and module load completion rates
- course completions
- cost per student contact hour

Apart from its recommendations to improve consistency and therefore comparability of general measures, The Boston Consulting Group also made recommendation that:

> *Quality and equity measures should be included to provide a 'closed loop' of good performance in VET. This will help to avert the risk that a focus on activity and output measures could distort behaviour and unfairly represent the performance of colleges that excel along quality and equity dimensions. It will also ensure that the KPMs used in VET are relevant to national training goals of quality of outcomes, opportunities and outcomes for individuals, responsiveness to the needs of industry, equity and access for disadvantaged groups, and public accountability.*[24]

The report proposed two additional KPMs for equity.

KPM	Equity in access	Equity in outcomes
Example of analysis	**State MIS** Number of students from target groups as a proportion of total target group population resident in State	**State MIS** Module completion rates for target groups
Potential published result	% participation of target groups	Completion rate for target groups

Benchmarking VET[4] is a report of performance measures for the VET system. Part B provides an analysis of the following performance measures.

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Indicator	Performance indicators
Outcome	1. Graduate destination 2. Employer satisfaction
Output	3. Module load completion rate (MLCR)
Activity (cost)	4. $/annual hours curriculum (AHC)
Activity	5. Actual and planned student load (enrolments and AHC) 6. Participation rates

Gender is reported only in relation to the participation rates indicators:

- Participation rates by sex and by State
- Participation in TAFE by age and sex
- Participation rates of males and females (aged 15-24) across education sectors

The publication also contains significant statistics, by gender, on employment status and satisfaction with training from the Graduate Outcomes Survey.

The report on government service provision, 1997[23] is part of the Review of Government Services which operates under the auspices of the Council of Australian Governments (COAG). It presents information on the efficiency and effectiveness of a number of publicly funded social services, including VET.

Chapter 4 of Volume 1, 'Vocational education and training', relies almost entirely on reproducing data from various ANTA reports. It considers five groups of effectiveness indicators: employer outcomes, student outcomes, planning process, access and participation, and equity. The indicators for gender are actually under the access and participation grouping rather than the equity grouping, and look solely at participation rates. The report also reproduces a table on graduate outcomes which would indicate that 54.7 per cent of 1995 TAFE graduates were women, when in fact the table illustrates that 54.7 per cent of those who responded to the survey were women. As there is no data to indicate whether the 61 per cent of graduates who responded were representative of the total group of graduates, it is quite possible that this 'outcome' is skewed. The report also considers two groups of efficiency indicators, but gender is not a factor in this consideration.

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2 Performance measurement in the school sector

The *report on government service provision*[26] also devotes a chapter to measuring the performance of government school education. This chapter is remarkable for its failure to mention girls anywhere. There is no analysis of whether there are any sex differences in literacy and numeracy test results, in retention rates, or in participation in maths and science. The priority groups to receive mention are those from NESBs, ATSIs, students who are geographically isolated, students from low socio-economic background and those with a disability.

However, much work has been done in developing equity indicators for the school sector; in particular, the work of the Australian Council for Educational Research.[27] The current National Action Plan for the Education of Girls (1993-1997) includes eight priorities. For each of these, there are key strategies for action, with system-level indicators and school-level indicators. Within these indicators, there is also a division between indicators of activity, output and outcomes; and indicators of student experiences. They propose two principles for selecting indicators:

- Parsimony: the principle of having as few indicators as possible and having indicators that summarise as much information as possible.
- Relevance: the principle of having indicators that relate to the major policy issues in an area.

Also of interest in this sector is *'Where do they go?' An evaluation of sources of data used for the monitoring of students' destinations and other educational outcomes in Australia,*[28] which reviewed the different projects monitoring post-secondary school experience of Australian students. It maps all of the questions and data fields used in various school-leaver surveys and provides useful comment on their comparability. It also provides a valuable insight into best practice for measuring equity:

> *To target specific programs as well as to achieve an equity perspective on the operation of mainstream programs, systems need data at the student group level. These data can be generated by student surveys which supplement institutional datasets. Because of the costs involved, an efficient approach would be to survey selected statistical regions in each State, based upon prior geographical and gender mapping, and to implement a rolling survey program over a period of years rather than seeking comprehensive coverage in any one year. This would contain costs, while providing systems with a rotating focus for targeting of improvement programs and for evaluation of sector arrangements.*
>
> *It is essential that data from surveys permit individual schools to view outcomes for their students (and not simply for the system to which they belong), and that qualitative data on non-cognitive outcomes ('the student perspective') be gathered, not only curriculum and assessment data.*[29]

3 Performance measurement in the higher education sector

Performance measurement has been an issue of concern in the higher education sector since the 1960s. However, the work on measuring performance really moved forward after the Linke Report[10], which defined 27 indicators for general performance measurement but left equity measures for further development.

The challenge was taken up by Lin Martin in her work, *Equity and general performance indicators in higher education*,[11] which set out to fill this gap. Martin looked specifically at measures for women in areas in which they are under-represented (those with less than 40 per cent female participation). The work trialed six indicators for women:

- Access: per cent of commencing students who are female
- Participation: per cent of total students who are female
- Ratio of proportion of total female students in postgraduate coursework courses to proportion of female students in undergraduate awards
- Ratio of proportion of total female students in postgraduate research courses to proportion of female students in undergraduate awards
- Ratio of student progress rate for female students to student progress rate for male students
- Ratio of apparent retention rate for female students to the rate for male students

Of particular use to discussion of performance indicators for gender equity in VET are Martin's discussion of reference and threshold values. These are explored more fully in Chapter 2.

Ferrier and Burke (1996)[12] in their paper recognise the greater complexity of VET as compared with higher education. They conclude that the higher education measures would be insufficient to measure equity in VET and advise that the different roles of national, State and provider bodies need to be addressed in any development of VET indicators. In particular, they raise the issue of who should set what targets and on what basis.

4 International experience

New Zealand

We have identified three publications of relevance from New Zealand. The first, a sophisticated primer on gender analysis; the second is a general article on performance measurement in higher education; and the third describes a case study at a New Zealand polytechnic about student outcomes. Each of these publications contributes a useful perspective on performance measurement, and a reinforcement of the notion that the issues are global.

Working from the premise that equal treatment will not necessarily produce equitable results, *The full picture—guidelines for gender analysis*[13] is an outstanding manual for considering the measurement of equity for women. It is not solely focussed on quantitative analysis but takes a holistic approach to government policy and practice.

Arguing that gender analysis can

- assist in improving the predictability of outcomes, and therefore contributes to policy being effective and efficient; and
- improve the accuracy of costings and projections in relation to uptake of programs or benefits

this publication provides detailed schematics for the 'how to' of gender analysis and detailed case studies of a public policy issue and a private sector product development/marketing issue. It would be of particular relevance for those seeking to contribute to improved equity outcomes outside the direct delivery domain.

In a more general performance review vein, Woodhouse[14] considers three aspects of performance measurement in higher education:

- students
- institutions
- external quality review

Of institutional performance, he argues that the primary purposes for measurement are improvement and accountability (including to the consumer). He advocates internal academic audit units rather than external quality review agencies as the most effective and efficient performance monitors.

By contrast, in its local, VET, student-outcomes focus, Coutts[15] conducted a case study at Wanganui Regional Community Polytechnic to establish patterns of student drop-out. The research identifies a similar participation pattern for women to that of the Australian VET sector. It shows that women tend to be concentrated in a narrow range of community and general education programs and their rate of withdrawal from more formal programs is higher than their withdrawal rate from general programs. While the paper pays scant attention to any other gender differences, it is nonetheless useful in describing the use of statistical analysis to identify differences that warrant further qualitative investigation.

United States and Canada

The relevant literature we found from the United States and Canada reflected very similar concerns to those exhibited by the Australian literature. Interestingly, while there appears to have been much written on performance measurement, and particularly from a public policy/public accountability perspective, we were unable to find much written about performance measures for equity for women.

The US literature tends to have a local institution focus, with emphasis on accountability to the community and individual students. The Canadian literature, reflecting a system more like our own, tends to take a systemic approach to public accountability and an institutional approach to performance improvement.

We include here a selection of our readings that may have utility in either improving performance measurement practice, or furthering the debate about shifting focus from inputs to outcomes and outputs.

Parker[16] presents a useful introduction to the issues of performance measurement in the public sector. In particular, his sections on the benefits and limitations of performance measurement and the relationship of performance measurement to budgeting are thoughtful contributions to the debate. His caution is particularly pertinent to the current Australian shift to outcomes measures:

> *Outcome-based budgeting would require the use of outcome measures, regardless of their cost. If all of the outcomes are not identified, agencies would have incentives to maximise the measurable outcomes to maintain or enhance funding, perhaps at the sacrifice of more important but less measurable outcomes ...*

The Association of Universities and Colleges of Canada's 'Primer on performance indicators'[17] is an extremely useful introduction to performance measurement. While the focus is on higher education, it is equally applicable to VET. It includes examples of performance measures, why they do or do not work, and places performance measurement in an accountability context.

British Columbia's Ministry of Education, Skills and Training is like its Australian counterparts moving towards a systemic performance measurement and accountability framework.[18] It has aligned performance indicators with broad post-secondary goals and educational processes. Its performance matrix is summarised as:

Performance measures aligned with educational goals			Performance measures aligned with educational processes	
ACCESS	Participation Student satisfaction		**INPUTS**	Revenues Costs
RELEVANCE AND QUALITY	Completion Employment Transfer Employer satisfaction Student satisfaction		**THROUGHPUTS** **OUTPUTS**	Space Utilisation Participation Completion Transfer
AFFORD-ABILITY	Revenues Costs Space utilisation Student satisfaction Employee satisfaction		**OUTCOMES**	Employment Student satisfaction Employer satisfaction Employee satisfaction

The 'Progress report on performance masurement and reporting', by the Accountability Working Group of the Ministry of Education, Skills and Training British Columbia[37], provides an interesting if incomplete picture of one province's approach to developing and implementing KPIs in the post-secondary education sector. There is a strong similarity between its indicators and those used in Australia, and its three-year implementation schedule with responsibilities divided between government and institution is not unfamiliar. Of its 18 indicators, the central agency is responsible for collecting only four, three of which relate to former students (graduates) and one is the employer satisfaction survey. We provide the URL for their Website as future evaluative reports of this process may be of interest.

The City of Grande Prairie has produced a useful guide to 'Performance measurement in government'[40], which summarises the key principles of public sector performance measurement and provides a useful bibliography. This includes internet resources and some private-sector examples of performance management.

Inger[41] addresses the issue of measuring educational processes for public accountability and performance improvement purposes. He discusses TQM, the 'student success model', value-added assessment, concept mapping and performance assessment. We include this reference because it highlights some options at institution or program level for measuring student outcomes other than a simple pass/fail or completion/non-completion measure. These options might be more useful for understanding what interventions might be necessary for performance improvement.

Kerka[42] presents a very brief review of literature on 'Gender equity in vocational education'. The main focus of this paper is on women-friendly approaches to

teaching and learning. It provides useful references for teaching resources but does not address performance measurement.

Other

Gender mainstreaming[43] is a study of the institutionalisation of gender issues in three international development agencies: the UNDP, the World Bank and the ILO. We include it here for no other reason than its conclusion is that incremental change runs a very real risk of addressing equity for women without effecting any real change. The paper advocates a more pro-active approach, one that sets the agenda for priorities and strategic intervention.

It is a timely reminder that if the new performance measures for VET are not constructed to also measure equity for women, then all measures of equity initiatives will not produce equitable outcomes for women in VET.

Appendix 2

Bibliography

Accountability Working Group 1995, 'Performance measurement and reporting for the BC college, institute and agency system', progress report, Ministry of Education, Skills and Training, British Columbia, December, URL: http://www.est.gov.bc.ca/psss

Ainley, J & Collins, C 1996, 'Issues for the development of equity indicators in VET raised by experiences in the school sector', paper delivered to the MCEETYA-VEET Women's Taskforce Seminar, Brisbane, October

Allen Consulting Group 1997, *Output and efficiency measures for vocational education and training*, final report to ANTA Performance Review Committee, May, pp.18-19

Australian National Training Authority (ANTA) 1994a, *Towards a skilled Australia: The National Strategy for Vocational Education and Training*

— ANTA 1994b, *Women and vocational education: An evaluation of the National Plan of Action for Women in TAFE*

— ANTA 1996a, *National Women's Vocational Education and Training Strategy*, March

— ANTA 1996b, *National Women's Vocational Education and Training Strategy—An implementation guide*

— ANTA 1996c, *Participation and attainment of individual client groups within vocational education and training*, May

— ANTA 1996d, *Benchmarking VET*, Brisbane, July

— ANTA 1996e, *Equity 2001*, Brisbane, September

— ANTA 1996g, *A stocktake and analysis of access and equity reports in vocational education and training, 1990-95*, September

Association of Universities and Colleges of Canada 1995, 'A primer on performance indicators', *Research File*, vol. 1, no.1, June

Barnett, K & Wilson, S 1995, *Separate responsibilities: A comparative, equity-focused study of commercial and community training providers*, DEET, AGPS, Canberra

Box Hill College of TAFE 1996, *Recognition and resource audit—gender perspective*, A National Plan of Action Project

City of Grande Prairie 1995, 'Performance measurement in government', *Strategic and business planning*, Alberta, Canada, URL: http://www.ccinet.ab.ca/city-of-gp/perform.htm

Coutts, C 1994, 'Utilising drop out research in the quest for quality: A Case study at Wanganui Regional Community Polytechnic', paper delivered to Quality assurance in education and training conference, Wellington, 10-12 May

DEET 1991, *Women and TAFE: A National Plan of Action*, Canberra

Department of Vocational Education and Training 1996, *Performance goals for target groups*, Hobart

DVET 1997, *Apprentice and trainee statistics for the month of February 1997*, Research Branch, Tasmania

DETAFE 1997, *Training South Australia's Future—1997 State training profile*, Appendix 4: Access and equity strategy, SA

Ferrier, F & Burke, G 1996, 'Equity performance measures for women: The higher education experience and its implications for VET', paper delivered to the MCEETYA VEET Women's Taskforce Seminar, Brisbane, October

Honeywood, The Hon P, Minister for Tertiary Education and Training 1996 *Managing diversity*, Ministerial Statement, November

Inger, M 1995 'Alternative approaches to outcomes assessment for postsecondary vocational education", *Center Focus*, No. 10, Winter

Kerka, S 1993 'Gender equity in vocational education', *Trends and Issues Alerts*, ERIC Clearinghouse on Adult, Career, and Vocational Education, Columbus Ohio

Linke, R (Chair) 1991, *Performance indicators in higher education*, report of a trial evaluation study commissioned by the Commonwealth Department of Employment, Education and Training, AGPS, Canberra

Lundberg, D & Cleary, M 1995, *Organising a fair go*, NCVER, Adelaide

Martin, L M 1994, *Equity and general performance indicators in higher education*, AGPS, Canberra

Ministry of Education, Skills and Training 1995, 'Accountability and outcomes in the college and institute system', British Columbia

Ministry of Women's Affairs, *The full picture—guidelines for gender analysis*, New Zealand, undated

National Board of Employment, Education and Training 1995, *'Where do they go?' An evaluation of sources of data used for the monitoring of students' destinations and*

other educational outcomes in Australia, Commissioned report no. 40, AGPS, Canberra

NSW TAFE Commission 1996, *Statistics newsletter*, Statistical Services Unit, June

Parker, W C 1993, 'Performance measurement in the public sector', Governor's Office of Planning and Budget, Utah

Performance Review Committee meeting papers, 22 April, 1997

Razavi, S & Miller, C 1995, *Gender mainstreaming*, Occasional paper no. 4, UN Research Institute for Social Development, Geneva

Smith, M & Ewer, P 1995, *The position of women in the National Training Reform Agenda and enterprise bargaining*, DEET, AGPS, Canberra

Steering Committee for the Review of Commonwealth/State Service Provision 1997, *Report on government service provision*, Industry Commission, Melbourne

The Boston Consulting Group 1995, *Review of implementation of performance measurement in VET*, December

WEATCU 1997, *NSW State Program of Action for Women in TAFE 1997-2000*, NSW TAFE Commission

Woodhouse, D 1996, 'Audit and assessment', paper delivered to New Zealand Organisation for Quality annual conference: Measuring performance—making quality pay, Dunedin, 15-17 May

Appendix 3

List of people consulted[44]

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Appendix 4

Consultancy brief

MCEETYA VEET WOMEN'S TASKFORCE PROJECT

EQUITY PERFORMANCE MEASURES FOR WOMEN

Purpose

The purpose of this brief is to define Stage 2 of the Equity Performance Measures for Women project, the output from which will be a report identifying performance measures for women which may later be incorporated into major national processes.

Background

Against the background of work under way nationally for the development of key performance measures for vocational education and training, the project, Equity Performance Measures for Women has been established by the MCEETYA VEET Women's Taskforce for the purpose of identifying a set of national performance indicators for women.

The need for performance information on access and equity, and performance measures to assess progress on these objectives was referred to in The *Report of the review of the ANTA agreement* published in February 1996. In fact, equity has been a concern of the VET sector for a long time, particularly in the context of TAFE's role as provider of 'second chance' education. Equally, performance reporting and measurement is an issue at the national level.

The publication of the report by the Boston Consulting Group in 1995 on comparability of data and key performance measures, and more recently, of the report on key performance measures, *Benchmarking VET—the performance of the vocational education and training sector in 1995* have progressed the issue further. Within States and Territories and locally, much work has been undertaken around these issues.

The national seminar in Brisbane on 3 October 1996 was an opportunity to bring the two strands of equity and performance together. A report of the seminar is attached. (Attachment A)

Current policy issues arising over the last two to three years have seen a shift from consideration of inputs, to a stronger focus on outcomes and the need for increased accountability. A number of reports have arisen from that focus, several of which are referred to in Attachments B and C.

Performance indicators have been developed in a number of organisations and in conjunction with the abovementioned reports, as also indicated in the attachments.

The equity performance measures project

In a two-stage process, the project Equity Performance Measures for Women (in VET) sets out to examine existing data bases and relevant indicators, consider relevant literature, consult with the VEET Women's Taskforce and other stakeholders with a view to recommending a set of performance indicators (or reporting options) for women in VET. The project is due for completion in July 1997.

As a first step, the seminar in October provided an opportunity for a stocktake of related issues with a view to shaping the development of equity performance measures for women. The revised second stage, evolving from the seminar, is the commissioning of a report which will explore a range of issues and present a recommended set of performance measures. A small reference group has been established, chaired by Jozefa Sobski.

Stage 2 - Proposal

Stage 2, a report on equity performance measures for women, will be based on:

- a literature and policy review
- outcomes from the seminar in Brisbane on 3 October 1996
- assessment of existing and proposed national measures against the National Strategy for Women

Title

MCEETYA VEET Women's Taskforce
Report on Equity Performance Measures for Women

For whom

The final report will go forward to the MCEETYA VEET Women's Taskforce for consideration and further action. It is also intended that it will be circulated to a wider audience, including stakeholders and ministers.

Objective

The objective of State 2 of the project is to produce a report which proposes a set of national performance measures for women in the vocational education and training sector. It is anticipated that these measures, once accepted, will be considered for incorporation into major national processes.

Contents of the report

As well as the background outlined above, research for this report will be informed by issues arising from the national seminar held in Brisbane on 3 October 1996.

The report will address the following issues.

- To what extent do existing VET indicators allow an adequate measurement of the outcomes specified in the National Women's VET Strategy?
- If they do not, what are the specific questions that they do not address or do not address adequately?

Some principles and priority areas for closer examination in the report are:

- equity performance measures should be relevant to national, systemic and local (i.e. organisation/institution/enterprise) considerations
- equity performance measures must relate to the major gender equity policy issues.

The report will also address the following concepts which, although based in the higher education sector, may be useful in the VET context:

- the concept of 'threshold' would provide greater precision to the measure of women's participation in non-traditional study and work
- the concept of reference value may make performance indicators more useful to VET institutions
- the concept of institutional targets may encourage individual institutions to link equity targets with equity plans and strategic plans more generally.

Methodology

It is anticipated that the exact methodology adopted for this stage of the project will be decided by the consultant, to meet the specified outcomes. However, in general terms, the methodology is expected to include at least the following:

- review of literature including:
  - the National Women's VET Strategy
  - ANTA publication *Participation and attainment of individual client groups within VET*
  - Benchmarking report
  - other publications such as those listed in Attachment B
- examine other sectors' experiences (higher education and schools)
- distil and incorporate essential outcomes from the Brisbane seminar
- examine VEET Women's Taskforce national performance measures
- analyse findings against availability of information, what it tells us, to whom is it most useful, at what level, group analysis

- draw together relevant issues from all of the above to develop a set of recommended performance measures
- consult with key stakeholders and others as identified by the Steering Committee and the consultant.

Steering committee

A steering committee will provide guidance to the project. Membership of the committee is:

Jozefa Sobski	SW Sydney Institute of TAFE (Chair)
Marie Aloise	NT Employment & Training Authority
Susan King	WA Department of Training
Wendy Murray	WA Department of Training
Kathy Tuncks	SA Department of Employment, Training & Further Education

It is anticipated that the consultant would meet once in person with this committee at the outset of the project (approximately early February 1997) and at other times possibly by teleconference, as required by the committee. The consultant would receive input to the process through these meetings.

Consultation

The consultant will be required to conduct a range of consultations during the course of the project, which may include:

- members of the Performance Review Committee
- State and Territory representatives
- VET providers
- representatives of ANTA
- selected community representatives.

Input on the selection of persons for consultation will be provided by the Steering Committee at its first meeting with the consultant.

Output/reporting

The outcome from this project will be a final report which proposes a set of performance measures to achieve equity for women in VET. It is anticipated that these performance measures would ultimately be incorporated into major national processes.

A substantial draft report drawing together all of the essential elements and presenting the performance measures will be prepared by the consultant and presented to the project manager. After consideration of the report, the survey manager may require the consultant to incorporate changes into the draft before producing the final report.

Timeframe

end January 1997	*Contract signed*
early February	*Meet with Steering Committee*
mid April	*Draft report presented*
late May	*Final report presented*

Costing

The consultant will provide a detailed summary of the proposed charge for Stage 2 prior to signing the contract. It is estimated that the contract would fall around $50 000, with possible variation. Such variation, according to the methodology adopted, would be agreed between the contract parties prior to signing the contract.

Contract arrangements

Once agreement has been reached on the price for Stage 2, a contract will be drawn up and signed between the consultant and the National Centre for Vocational Education Research Ltd.

Project management

Ms Jessie Borthwick is the designated project manager, to whom the consultant will report on all matters. Her address is:

NCVER Ltd (Canberra Office)
Ground Floor, Unit 1
99 Northbourne Avenue
TURNER ACT 2612

Telephone: 06 230 0699 Fax: 06 230 0799

It is anticipated that the consultant would report to the project manager as follows:

- at the end of Week 3 of the project
- at the end of 2-3 months at the draft report stage, and
- with the presentation of the final report.

NCVER (Canberra Office)
10 December 1996

Notes

1 ANTA 1996a, *National Women's Vocational Education and Training Strategy*

2 ANTA 1994a, *Towards a skilled Australia: The National Strategy for Vocational Education and Training*

3 DEET 1991, *Women and TAFE: A National Plan of Action*, Canberra

4 Ibid.

5 *Ibid.*, p.10

6 ANTA 1994b, *Women and vocational education: An evaluation of the National Plan of Action for Women in TAFE*

7 ANTA 1996a, *op.cit.*, p.2

8 ANTA 1996b, *National Women's Vocational Education and Training Strategy—An implementation guide*

9 WEATCU 1997, *NSW State Program of Action for Women in TAFE 1997-2000*, NSW TAFE Commission

10 DETAFE 1997, *Training South Australia's future—1997 State training profile*, Appendix 4: Access and Equity Strategy, SA

11 Honeywood, The Hon P, Minister for Tertiary Education and Training 1996, *Managing diversity*, Ministerial Statement, November

12 ANTA 1996c, *Participation and attainment of individual client groups within vocational education and training*, May

13 Department of Vocational Education and Training 1996, *Performance goals for target groups*, Hobart

14 ANTA 1996e, *Equity 2001*, Brisbane, September

15 ANTA 1996g, *A Stocktake and analysis of access and equity reports in vocational education and training, 1990-95*, September

16 *Ibid.*, p.9

17 Barnett, K & Wilson, S 1995, *Separate responsibilities: A comparative, equity-focused study of commercial and community training providers*, DEET, AGPS, Canberra

18 Smith, M & Ewer, P 1995, *The position of women in the National Training Reform Agenda and enterprise bargaining*, DEET, AGPS, Canberra

19 Box Hill College of TAFE 1996, *Recognition and resource audit—gender perspective*, A National Plan of Action Project

20 Lundberg, D & Cleary, M 1995, *Organising a fair go*, NCVER, Adelaide

21 Butler, E 1997, 'Beyond political housework: Gender equity in the post-school environment', Paper prepared for the NSW Premier's Council for Women, April

22 The Boston Consulting Group 1995, *Review of implementation of performance measurement in VET*, December

23 *Ibid.*, p.34

24 ANTA 1996d, *Benchmarking VET*, Brisbane, July

25 Steering Committee for the Review of Commonwealth/State Service Provision 1997, *Report on government service provision*, Industry Commission, Melbourne

26 *Ibid.*

27 See for example Ainley, J & Collins, C 1996, 'Issues for the development of equity indicators in VET raised by experiences in the school sector', paper delivered to the MCEETYA VEET Women's Taskforce Seminar, Brisbane, October

28 National Board of Employment, Education and Training 1995, *'Where do they go?' An evaluation of sources of data used for the monitoring of students' estinations and other educational outcomes in Australia*, Commissioned report no. 40, AGPS, Canberra

29 *Ibid.*, p.xvii

30 Linke, R (Chair) 1991, *Performance indicators in higher education*, Report of a trial evaluation study commissioned by the Commonwealth Department of Employment, Education and Training, AGPS, Canberra

31 Martin, L 1994, *Equity and general performance indicators in higher education*, Flinders University

32 Ferrier, F & Burke, G 1996, 'Equity performance measures for women: The higher education experience and its implications for VET', paper delivered to the MCEETYA VEET Women's Taskforce Seminar, Brisbane, October

33 Ministry of Women's Affairs, *The full picture—guidelines for gender analysis*, New Zealand, undated

34 Woodhouse, D 1996, 'Audit and assessment', paper delivered to New Zealand Organisation for Quality annual conference: Measuring performance—Making quality pay, Dunedin, 15-17 May

35 Coutts, C 1994, 'Utilising drop out research in the quest for quality: A case study at Wanganui Regional Community Polytechnic', paper delivered to Quality assurance in education and training conference, Wellington, 10-12 May

36 Parker, W C 1993, 'Performance measurement in the public sector', Governor's Office of Planning and Budget, Utah

37 Association of Universities and Colleges of Canada 1995, 'A Primer on Performance Indicators', *Research File*, vol. 1, no. 1, June

38 Ministry of Education, Skills and Training 1995, 'Accountability and outcomes in the college and institute system', British Columbia

39 Accountability Working Group 1995, 'Performance measurement and reporting for the BC college, institute and agency system', Progress report, Ministry of Education, Skills and Training, British Columbia, December, URL: http://www.est.gov.bc.ca/psss

40 City of Grande Prairie 1995, 'Performance measurement in government', *Strategic and Business Planning*, Alberta, Canada, URL: http://www.ccinet.ab.ca/city-of-gp/perform.htm

41 Inger, M 1995, 'Alternative approaches to outcomes assessment for postsecondary vocational education", *Center Focus*, No. 10, Winter

42 Kerka, S 1993, 'Gender equity in vocational education', *Trends and Issues Alerts*, ERIC Clearinghouse on Adult, Career, and Vocational Education, Columbus Ohio

43 Razavi, S & Miller, C 1995, *Gender mainstreaming*, Occasional paper no. 4, UN Research Institute for Social Development, Geneva

[11] This list includes those consulted on the related project, Survey of Performance Management Practices of State and Territory Training Authorities. While in a number of cases, equity for women was not specifically discussed, information was provided about general measurement issues which has been used to inform this study.

The National Centre for Vocational Education Research is Australia's primary research and development organisation in the field of vocational education and training.

NCVER undertakes and manages research programs and monitors the performance of Australia's training system.

NCVER provides a range of information aimed at improving the quality of training at all levels.

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